WOOD

Assembly instructions

LogWIN Klassik

½ m wood gasification boiler
For small and large houses
Nominal thermal output: 18, 25, 30 kW

windhager
HEAT WITH VISION

10/2013 093391/01

USER MANUAL FOR BATCH FED INDEPENDENT WOOD LOG FIRED BOILERS

SUPPLEMENTARY INSTALLATION INSTRUCTIONS FOR THE UK MARKET TO BE READ IN CONJUNCTION WITH THOSE IN THE INSTRUCTION BOOKLET

READ THE INSTRUCTION BOOKLET AND THESE SUPPLEMENTARY INSTRUCTIONS CAREFULLY BEFORE INSTALLATION

These instructions together with those in the instruction booklet cover the basic principles to ensure the satisfactory installation of the boiler, although detail may need slight modification to suit particular local site conditions.
In all cases the installation must comply with current Building Regulations, Local Authority Byelaws and other specifications or regulations as they affect the installation of the boiler.
If any guidance contained within this manual contradicts advice given in the main manufacturer's instruction manual then the most stringent advice must apply.
It should be noted that the Building Regulations requirements may be met by adopting the relevant recommendations given in British Standards BS 8303, BS EN 15287-1:2007 as an alternative means to achieve an equivalent level of performance to that obtained following the guidance given in Approved Document J.

Please note that it is a legal requirement under England and Wales Building Regulations that the installation of the boiler is either carried out under Local Authority Building Control approval or is installed by a Competent Person registered with a Government approved Competent Persons Scheme. HETAS Ltd operate such a Scheme and a listing of their Registered Competent Persons can be found on their website at www.hetas.co.uk.

CO Alarms:-

Building regulations require that whenever a new or replacement fixed solid fuel or wood/biomass appliance is installed in a dwelling a carbon monoxide alarm must be fitted in the same room as the appliance. Further guidance on the installation of the carbon monoxide alarm is available in BS EN 50292:2002 and from the alarm manufacturer's instructions. Provision of an alarm must not be considered a substitute for either installing the appliance correctly or ensuring regular servicing and maintenance of the appliance and chimney system.

HEALTH AND SAFETY PRECAUTIONS

Special care must be taken when installing the boiler such that the requirements of the Health and Safety at Work Act (1974) are met.

Handling

Adequate facilities must be available for loading, unloading and site handling.

Fire Cement

Some types of fire cement are caustic and should not be allowed to come into contact with the skin. In case of contact wash immediately with plenty of water.

Asbestos

This boiler contains no asbestos. If there is a possibility of disturbing any asbestos in the course of installation then please seek specialist guidance and use appropriate protective equipment.

Metal Parts

When installing or servicing this boiler care should be taken to avoid the possibility of personal injury.

BOILER PERFORMANCE

Refer to the main instruction manual for details of the boiler's performance.

PREPARATORY WORK AND SAFETY CHECKS

IMPORTANT WARNING

This boiler must not be installed into a chimney that serves any other heating appliance.

There must not be an extractor fan fitted in the same room as the boiler as this can cause the boiler to emit fumes into the room.

Chimney

In order for the boiler to perform satisfactorily the chimney height must be sufficient to ensure an adequate draught of approximately 15 Pa so as to clear the products of combustion and prevent smoke problems into the room.

NOTE: A chimney height of not less than 4.5 metres measured vertically from the outlet of the boiler to the top of the chimney should be satisfactory. Alternatively the calculation procedure given in EN 13384-1 may be used as the basis for deciding whether a particular chimney design will provide sufficient draught.

The outlet from the chimney should be above the roof of the building in accordance with the provisions of Building Regulations Approved Document J.

Because the boiler runs at high efficiencies, the temperature of the flue gases is at times lower than conventional solid fuel appliances. Although it is not classed as a condensing appliance, the low flue gas temperature results in condensation occurring within the flue. Any chimney flue system must therefore be able to withstand the effects of condensate and operate under wet conditions (designation letter W). In addition it should be soot fire resistant and able to withstand the corrosive effects of flue products generated by solid fuels (designation G and 3 respectively). If installation is into an existing masonry chimney then it will require re-lining with a liner meeting the specification described above. Existing concrete or clay lined chimneys are not suitable for this boiler and must be lined as described above. All installations must be in accordance with Building Regulations Approved Document J.

Any existing chimney must be clear of obstruction and have been swept clean immediately before installation of the lining system. Where the chimney is believed to have previously served an open fire installation it is possible that the higher flue gas temperature from a closed appliance may loosen deposits that were previously firmly adhered, with the consequent risk of flue blockage. It is therefore recommended that the chimney be swept a second time within a month of regular use after installation.

If there is no existing chimney then any new system must be to the designation described above and in accordance with Building Regulations Approved Document J.

A single wall metal fluepipe is suitable for connecting the boiler to the chimney but is not suitable for use as the complete chimney. The chimney and connecting fluepipe must have a minimum diameter of 150 mm and its dimension should be not less than the size of the outlet socket of the boiler.

Any bend in the chimney or connecting fluepipe should not exceed 45°. 90° bends should not be used.

Combustible material should not be located where the heat dissipating through the walls of fireplaces or flues could ignite it. Therefore when installing the boiler in the presence of combustible materials due account must be taken of the guidance on the separation of combustible material given in Building Regulations Approved Document J and also in these boiler instructions.

If it is found that there is excessive draught in the chimney then a draught stabiliser should be fitted in the chimney above the chimney above the flue pipe connection. Fitting of a draught stabiliser will affect the requirement for the permanent air supply into the room in which the boiler is fitted in accordance with Approved Document J (see also combustion air supply).

Adequate provision e.g. easily accessible soot door or doors must be provided for sweeping the chimney and connecting fluepipe.

Hearth

The hearth should be able to accommodate the weight of the boiler and its chimney if the chimney is not independently supported. The weight of the boiler is indicated in the brochure.

The boiler should preferably be installed on a non-combustible hearth of a size and construction that is in accordance with the provisions of the current Building Regulations Approved Document J.

The clearance distances to combustible material beneath, surrounding or upon the hearth and walls adjacent to the hearth should comply with the guidance on the separation of combustible material given in Building Regulations Approved Document J and also in these boiler instructions.

If the boiler is to be installed on a combustible floor surface, it must be covered with a non-combustible material at least 12mm thick, in accordance with Building Regulations Approved Document J, to a distance of 30 cm in front of the boiler and 15 cm to each side measuring from the door of the combustion chamber.

Combustion air supply

In order for the boiler to perform efficiently and safely there must be an adequate air supply into the room in which the boiler is installed to provide combustion air. The provision of air supply to the boiler must be in accordance with current Building Regulations Approved Document J. An opening window is not appropriate for this purpose.

Connection to chimney

All boilers have a flue gas connector that allows connection to either a masonry chimney or a prefabricated factory made insulated metal chimney in accordance with the instructions. This connection should never be reduced in diameter to lower than that of the flue gas connector of the boiler. In some cases it may be necessary to fit an adapter in the connection pipe to increase the diameter to the required minimum diameter of 150 mm for burning wood fuel in accordance with UK regulations. Any connections should be made gas-tight and sealed with a suitable sealing agent such as fire cement.

Connection to the central heating system

The boilers may be installed on either open vented or sealed fully pumped systems. The water system must be properly vented and a double-feed indirect cylinder to the current specification in issue BS 1566 Part 1 for double indirect cylinders is necessary where there is a combined hot water and central heating system.

During installation caution must be made on the need for a gravity heat-leak radiator or towel rail to dissipate heat when the pump is off and the minimum load for this function.

The central heating system must be in accordance with BS EN 14336:2004: Heating Systems in Buildings. Installation and commissioning of water based heating systems. BS EN 12828: 2003; Heating Systems in Buildings. Design of water based heating systems. BS EN 12831: 2003; Heating Systems in Buildings. Method for calculation of the design heat load and BS 6880:1988 Parts 1 to 3, Code of Practice for low temperature hot water heating systems of output greater than 45kW where appropriate.

Electrical connections

The installation of any electrical services during the installation of this boiler and the associated heating system must be carried out by a registered competent electrician and in accordance with the requirements of the latest issue of BS 7671.

Commissioning and handover

Ensure all parts are fitted in accordance with the instructions.

On completion of the installation allow a suitable period of time for any fire cement and mortar to dry out, before lighting the boiler. Once the boiler is under fire check all seals for soundness and that the boiler and water system are operating correctly. Ensure that the flue is functioning correctly and that all products of combustion are vented safely to atmosphere via the chimney terminal.

On completion of the installation and commissioning ensure that the operating instructions for the boiler are left with the customer. Ensure to advise the customer on the correct use of the appliance and warn them to use only the recommended fuel for the boiler.

Advise the user what to do should smoke or fumes be emitted from the boiler. The customer should be advised about restricting access to the boiler by children, aged and/or infirm people.

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1. Important initial information for the Technician

The following instructions are available for operation and installation:
Heating expert: Assembly/installation instructions, list of spare parts
System owner: Operating Manual, quick guide, heating instructions

1.1 Safety precautions

The boiler and related accessories are state of the art and meet all applicable safety regulations. Your boiler and all accessories operate using 230 V AC electric current. Improper installation or repair can pose the danger of life-threatening electric shock. Installation may be performed only by appropriately qualified technicians.

Caution symbols

Please take careful note of the following symbols in these Installation instructions.

Attention!

Ignoring the warnings identified can lead to personal injury.

Information!

Ignoring the warnings identified can lead to malfunction of, or damage to the boiler or heating system.

Note!

The blocks of text highlighted provide **information and tips** for operation.

1.2 Flue

A properly dimensioned flue is required for optimal functioning of the combustion system. Measurement of the dimensions must follow EN 13384-1. See the Technical data section for values required for this calculation.

Please note that in the permissible performance range, flue gases may be below 160°C.

The flue gas system must display at least the following classification:

Temperature class:	T400	= nominal operating temperature 400 °C
Soot fire resistance class:	G	= flue gas system with soot fire resistance
Corrosion resistance class:	2	= suitable for unprocessed wood fuels

We would recommend fitting an energy-saving intake regulator for problem-free operation. This will largely prevent moisture in the flue, and losses resulting from down-time will be reduced (draught interruptions). If you have a feed pressure (flue draught) of more than 0.20 mbar, the energy-saving intake regulator must be fitted.

Note!

We would recommend fitting the draught limiter outside the flue around ½ m below where the exhaust pipe intersects with the flue.

Information!

Frequently, overhaul of existing systems involves oversized flue cross-sections or flues not designed for lowtemperature operation. We suggest an evaluation by the local building inspector before installing the boiler system. In this way appropriate modifications can be made to the flue before system installation (see technical data for flue calculation values).

1.3 Boiler room/Installation room

Attention!

The configuration of the entire system must comply with the requirements of regional legislation, applicable regulations, standards and guidelines.

- The minimum clearances for connections, cleaning and maintenance must be complied with – see section 2.4.3 Minimum service clearances.
- Sufficient ventilation of the set-up area must be assured. See section 2.2.9 Combustion air.
- The boiler must be installed in dry premises!
- The boiler may not be installed in rooms that are very dusty or humid.

Permissible limit values: Air humidity: 85 % at room temperature of 25 °C (non-condensing)
Room temperature: +2 to +40 °C

1.4 Initial start-up and operating instructions

Windhager Customer Service or the customer service partner will start up the boiler first of all, and will familiarise the customer with the system operation and cleaning of the boiler, with reference to the Operating Manual.

The following preconditions must be met before you order the initial start-up:

1.) Boiler installed correctly.
2.) System fully wired up electrically.
3.) System rinsed, filled and vented – heat consumption must be possible.
4.) Boiler connected to domestic water and filled.
5.) Sufficient quantity of fuel available (pellets, oil, gas, slit logs).
6.) The customer must be present during start-up.

The initial start-up cannot be carried out if any of these points are neglected. The customer will be charged for any unnecessary costs arising as a result.

Start-up and maintenance by Windhager Customer Service or a customer service partner are part of the guarantee requirements of the enclosed "guarantee limitations".

Note!

When the boiler is heated up for the first time, bad smells may result from gas emissions from insulation or paint residue being burnt off. Ensure that the boiler room/installation room is therefore well vented. Condensation may also form near the coasting surfaces and the combustion chamber temperature may only increase after a delay.

2. For the Installer

2.1 Delivery, packaging

2.1.1 LogWIN Klassik

Boiler covered with a plastic sack.
The cladding, control panel and small parts can be found in the 2 cardboard boxes and in the filler chamber.

Fig. 2 LogWIN Klassik

2.1.2 Optional accessories

Fitted in control panel, if ordered:

- MESplus system control (installed and pre-wired)

Supplied with the boiler if ordered:

- Adapter for steplessly adjustable flue connection on left, right
- Exhaust gas sensor kit with protective tube
- Automatic ignition
- Thermal process safeguard
- Energy-saving intake regulator
- Return hold-up group
- Motorised mixing valve, mixer groups, heating distributor
- Cleaning kit
- Flue gas thermostat

2.2 System

2.2.1 Area of use

For heating buildings acc. to EN 12831.
The boilers are designed and approved as heat generators for hot water heating systems with a permissible flow temperatures of up to 90°C. They may be installed only in sealed systems. The max. boiler temperature for the LogWIN is limited in the factory to 80 °C.

The resulting flow temperature depends on the relevant operating status and the line losses to the system.

2.2.2 Standards

The following European standard should be followed: EN 12828, this specifies that the following should be fitted:

a) A closed expansion tank.

b) A reliably functioning safety valve (with max. 3 bar reaction pressure) installed at the highest point of the boiler or at a non-closable line.

c) A thermometer, a pressure gauge.

d) An automatic device for dissipating heat which will prevent the maximum water temperature in the boiler of 110°C from being exceeded. The built-in thermal safety device (heat exchanger) should always be used with the thermal discharge safeguard.

e) A low-water cut-off: A low-water cut-off is not required for systems providing up to 300 kW nominal thermal output, if it can be ensured that a lack of water in the system will not result in excess heating.

   If the boiler is above the radiators, then a low-water cut-off must be installed.

2.2.3 Accumulator tank

The installation of a buffer tank is required by the following standards / laws:

- EN 303-5
- 1st Federal Immission Control Ordinance (Germany)
- Art. 15a of the Small Combustion Devices Agreement (Austria)
- Air Protection Ordinance (Switzerland)

Having a correctly sized accumulator tank is essential for correct operation of a wood-fired heating system. The fuel must always be selected and the heat load of the building calculated. Heating characteristics (e.g. bringing the hot water tank up to temperature in summer) and the system configuration (ground and/or radiator heating circuits) should also be taken into consideration.

Information!

Rooms that are not heated at times (guest rooms, living areas only used at weekends, etc.) must be subtracted from the calculated heat load (QH) for the accumulator tank configuration!

Recommended accumulator tank content

Wood gasification	Boiler model	Recommended accumulator tank content:
LogWIN Klassik	LWK 180 – 300	2000 l

Note!

Refer to planning documents for how to calculate the minimum buffer tank volume.

2.2.4 Heating circuits

Several heating circuits:

In-line regulating valves should be installed to permit better regulation of the system. In a building without insulation (new building, not yet plastered) the calculated and actually required heating requirements often differ to a considerable extent.

Minimum heat consumption:

The smallest possible boiler power must be continuously dissipated from the boiler during operation. Suitable measures to ensure minimum heat consumption should be maintained throughout the entire burning time, e.g.:
- Correctly dimensioned buffer tank - see 2.2.3.
- Function of the MES plus–controller in the WVF+ function module on the master user module incl. no thermostatic valves
- Non-blockable heating circuit, e.g. never fully close manual mixing valve, incl. no thermostatic valves

Note!

If operating with a manual mixing valve or the MES plus–function, elevated room temperatures may sporadically occur.

Mixer valve:

A 3-way mixer valve is always necessary; in conjunction with outside temperature control, there must be a 3-way motorised mixing valve and a buffer tank.

Underfloor heating:

Only possible with a buffer tank (with outside temperature control, motorised mixing valve).

Return flow temperature increase:

Required with LogWIN Klassik. It is essential that a return temperature of 61 °C be maintained during heating.

In order to achieve good temperature stratification in the heat accumulator or buffer tank, we recommend that the boiler circuit be regulated. When using the return hold-up group SK RH 61 in connection with the stratified charge function (MESplus function module WVF+), regulating the boiler circuit is no longer necessary.

Boiler start-up relief:

A boiler start-up relief must be installed and connected in all cases so that the circulation pump(s) are switched off when the boiler temperature is below 60 °C. This prevents condensation forming in the boiler and extends its service life.
A boiler start-up relief of this kind is contained in the MESplus control system.

2.2.5 Circulation pump

We recommend using pumps efficiency class A.

2.2.6 Heating water

a) The chemical composition of the heating water must meet the specifications of ÖNORM H 5195 Part 1 or VDI 2035 P1. According to ÖNORM H 5195 Part 1 (2010 edition), the condition of the heating water must be checked every 2 years by a heating technician in order to avoid corrosion and sediment accumulation in the heating system.

b) The pipe lines and heating appliances should be thoroughly rinsed before the boiler is connected.

c) To protect the boiler from contamination from the heating system, installation of a dirt trap is required in old or existing systems (mesh size 0.5 mm) with maintenance cocks installed in the return line.

d) If oxygen diffusion or sludge build-up cannot be prevented, the system must be segregated by means of a heat exchanger.

e) If antifreeze is used, a minimum volume of 20% antifreeze is required, otherwise corrosion prevention is not guaranteed.

2.2.7 Domestic water (bringing the hot water tank up to temperature in summer)

There may still be fuel in the boiler after the hot water tank has been brought up to temperature. As a result, measures must be taken to dissipate the surplus energy – see 2.2.4 Heating circuits; Minimum heat consumption.

2.2.8 Combination with automatic boiler (e.g. pellet or oil-fired boiler)

If the LogWIN and an automatic boiler (e.g. pellet or oil-fired boiler) are connected to one flue **without a MESplus** control, in the case of LogWIN a flue gas thermostat (accessory OK-050) must be installed to prevent parallel operation on the same flue.

2.2.9 Water-side resistance (pressure loss)

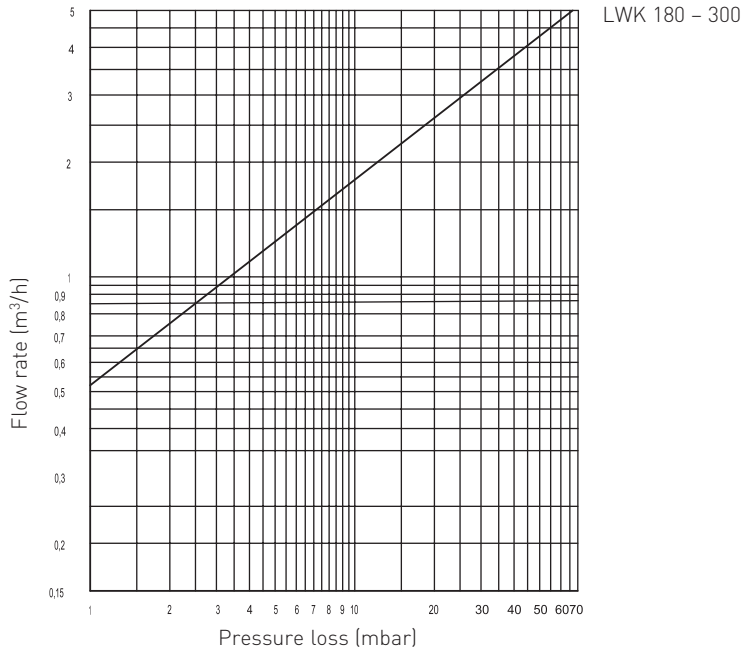


Diagram 1 water-side resistance

2.2.10 Combustion air

The combustion air is drawn directly by the device from the installation room, therefore the installation room has to be adequately ventilated. The combustion air should be directed to the vicinity of the boiler and must be free from pollutants (gases, vapours and dusts), otherwise malfunctions and increased wear (e.g. corrosion) may occur.

The area of the free minimum cross-section must be 5 cm^2 per kW of the boiler's nominal total output[1].

The opening to the outdoors for combustion air should be designed as follows:
- the flow of air must not be restricted in any way by the weather (e.g. snow, leaves),
- the free cross-section area remains the same when taking the cover grille, discs etc. into consideration.

Information!

Malfunctions or complaints occasioned by inadequate combustion air will not be covered by the guarantee!

1 The boiler's nominal total output is the sum of the nominal outputs of all heat generators installed in the same boiler / installation room.

2.4 Installation sequence

2.4.1 Parts designations for installation

Information!

All cladding parts must be fitted in full for air guidance and the dissipation of heat on the boiler.

1.....Lower door hinge
2.....Carburisation gas duct
3.....Side panel left
4.....Side panel right
5.....Rear wall top
6.....Rear wall bottom
7.....Front boiler cover
8.....Rear boiler cover
9.....Hook-in plate ash pan
10.....Bottom insulation, left/right
11.....Top insulation, left/right
12.....Top rear insulation
13.....Bottom rear insulation
14.....Top front insulation
15.....Cladding door
16.....Magnet retainer (2 pcs.)
17.....Lever for cleaning heating surfaces
18.....Carburisation gas duct attachment (2 pcs.)
19.....Control panel
20.....Upper door hinge
21.....Control panel
22.....Dog point screw (2 pcs.)
23.....Cable channel (2 pcs.)
24.....Lambda sensor
25.....Air control
26.....Set screws front (2 pcs.)
27.....Magnetic catch (2 pcs.)
28.....Blower seal
29.....Flue connection adapter - accessories
30.....Blower housing
31.....Flue gas blower
32.....Wing nugs
33.....Lighting door with automatic ignition - accessory
34.....Hanger - accessory

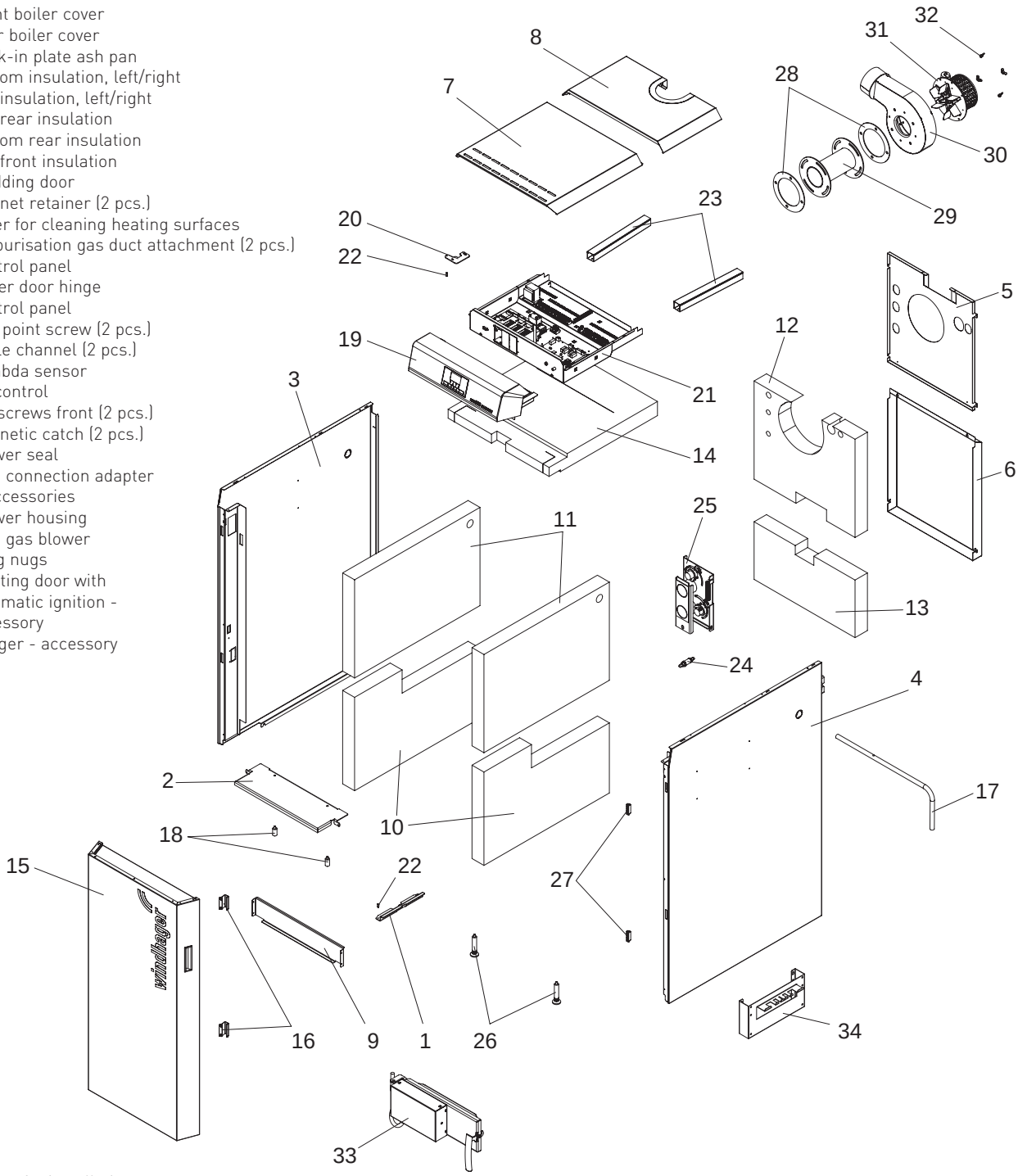


Fig. 4 Parts for installation

2.4.2 Taking into the building and installing

The appliance must be taken into the building and installed without subjecting it to significant knocks and jolts, in order to avoid damaging the combustion chamber and/or the parts slipping. The warranty will be invalidated if the appliance is damaged due to having been taken into the building and installed incorrectly or if the appliance malfunctions as a consequence of this.

The LogWIN may only be transported upright and without cladding and it is easiest to transport using a lift truck or by rolling on pipes. When transporting via stairs and the such like, the boiler must be suitably secured. Also refer to the technical data in section 4.5 for transport dimensions.

Note!

There is a crane lug on the top of the boiler for transport using hoisting winches. The weight can be reduced by approx. 120 kg by removing parts which are easy to disassemble (e.g. doors, hook-in plates, burnthrough plates, heating surface cleaning etc.).

The boiler can be installed directly on a non-flammable surface and does not require special foundations.

2.4.3 Minimum clearances

For maintenance and servicing it is essential to comply with the minimum clearances for the walls, hydraulic components and connection pipes.

Attention!

Follow the installation guidelines for boiler rooms!

All dimensions in mm:
Recommended minimum room heights: 1850 mm

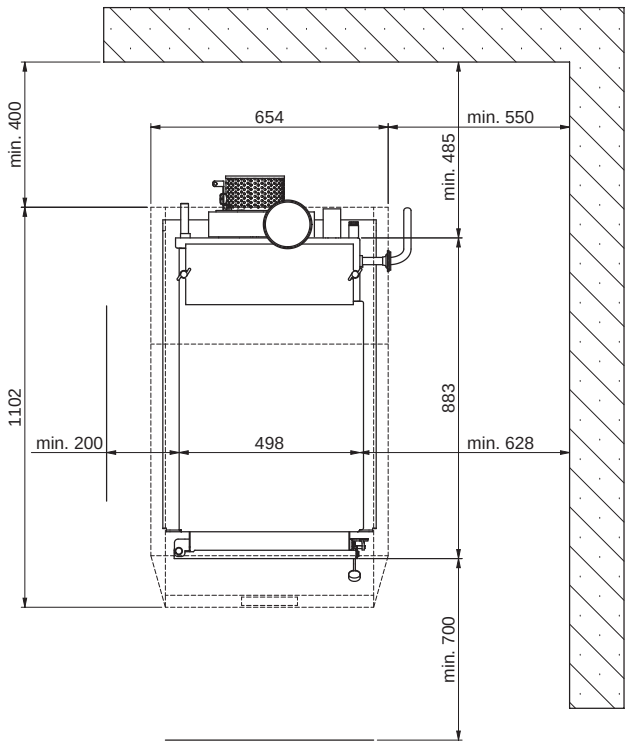


Fig. 5 LogWIN Klassik exhaust pipe upwards – top view

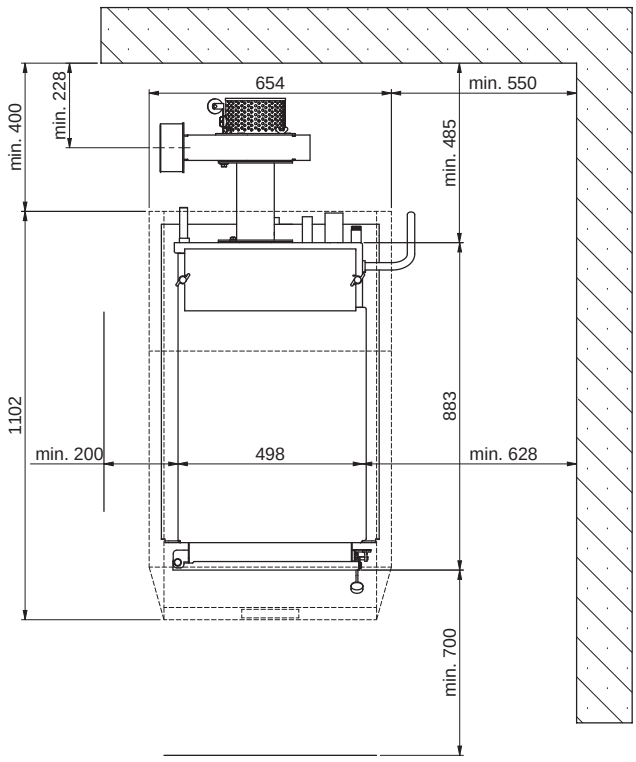


Fig. 6 LogWIN Klassik with exhaust pipe adapter– top view

2.4.4 Prior to installation

Move the boiler to its definitive installation position and use the set screws to align it inclined slightly upwards towards the rear. If it is not possible to level the unit using only the rear set screws, two additional set screws can be installed at the front – Fig. 8.

The cladding door and the boiler doors are designed for door catches on either the left or right. Standard delivery always includes door catches on the left. The catches on the cladding door and boiler doors must be on the same side.
Prior to installing the set screws, the lower door hinge and the dog point screw for attaching the cladding door must be mounted either on the left or right, depending on which side the door catches are to be located. – Fig. 7.

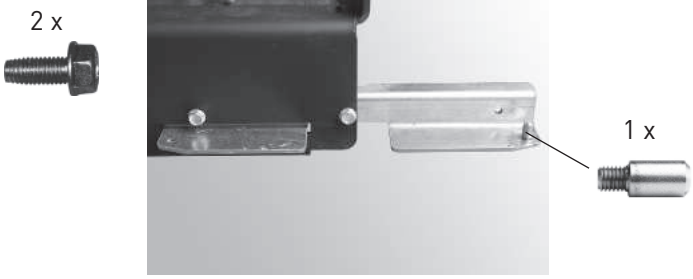


Fig. 7 Install door hinge for cladding door left or right

Fig. 8 Install two set screws in the front

2.4.5 Installing the flue connection adapter

– Only for LogWIN with flue connection adapter (accessories)

  Standard installation of the blower housing is directly on the boiler – Fig. 9 ➔ flue connection at top.

  With the adapter (accessories), the blower housing is located outside the cladding – Fig. 12. The flue connection is steplessly adjustable from left to right – Fig. 11.

– Unscrew 4 interior nuts in the blower housing (Fig. 9) and remove the housing. Do not remove the seal – Fig. 10.

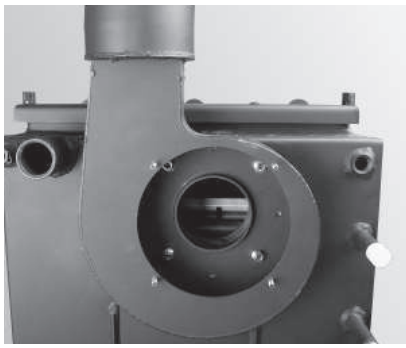


Fig. 9 Glower housing directly on boiler – standard

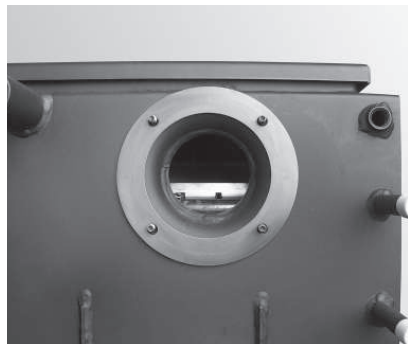


Fig. 10 Seal on boiler

– Secure adapter, with slot position depending on desired angle of flue connection, on boiler according to Fig. 11 with seal and 4 M8 nuts – Fig. 11, 12.

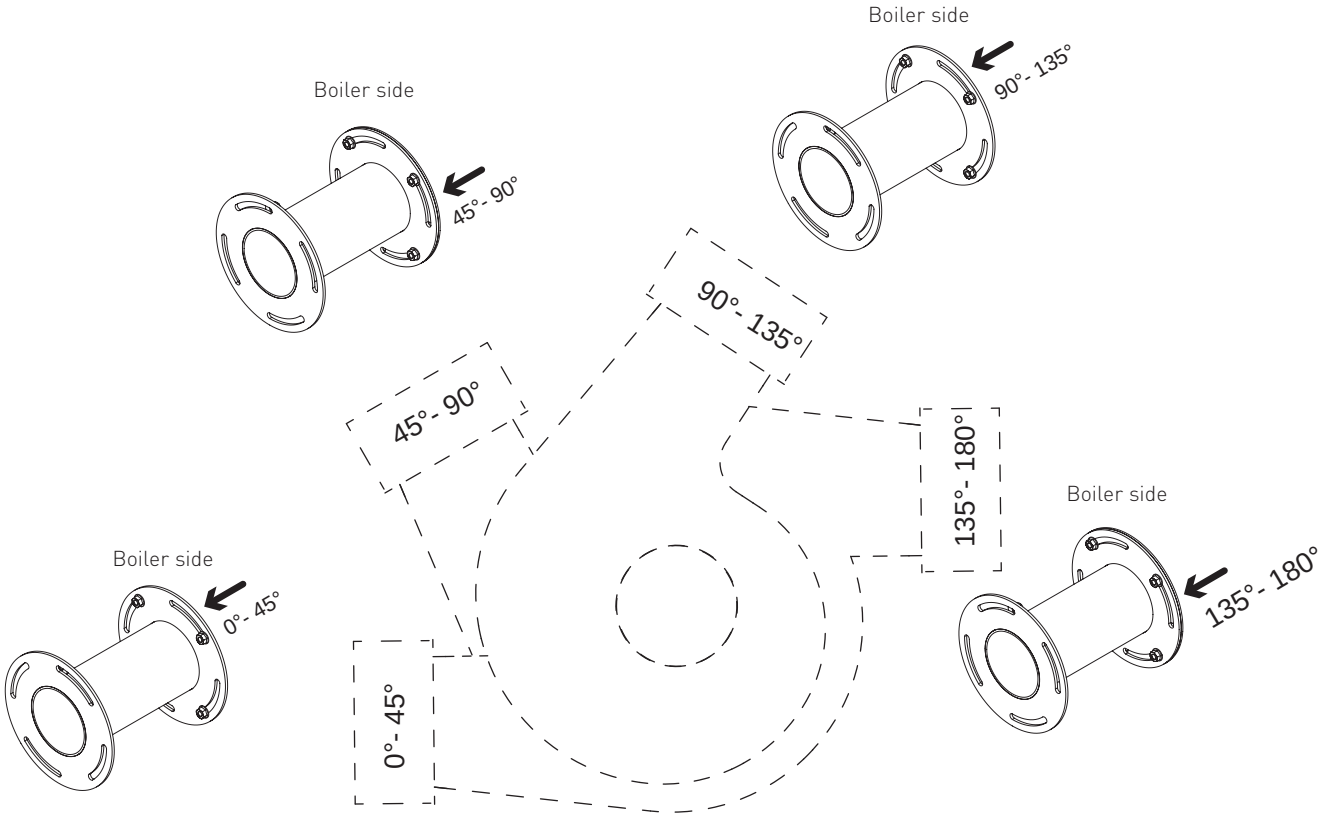


Fig. 11 Installation of adapter depending on angle of flue connection

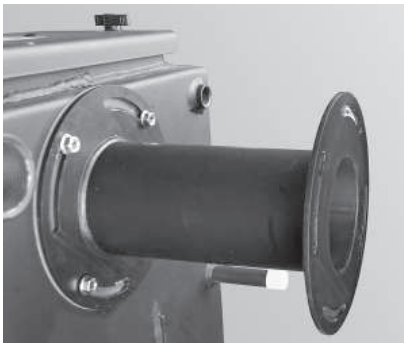


Fig. 12 Adapter on the boilder (accessories)

Note!

Do not screw the blower housing onto the adapter until the rear panel has been installed – otherwise the rear panel cannot be installed.

2.4.6 Installing the flue gas blower, air control and lambda sensor

- Screw the flue gas blower to the blower housing with 4 wing nuts – Fig. 15.
- Hook in the air control at the top and secure with screw at the bottom – Fig. 13, 15.
- Screw the lambda sensor in finger tight and tighten approx. 1/4 turn with an open-ended wrench (SW 22) – Fig. 14, 15.

Fig. 13 Hooking in air control at top and screwing on at bottom

Fig. 14 Lambda sensor installed

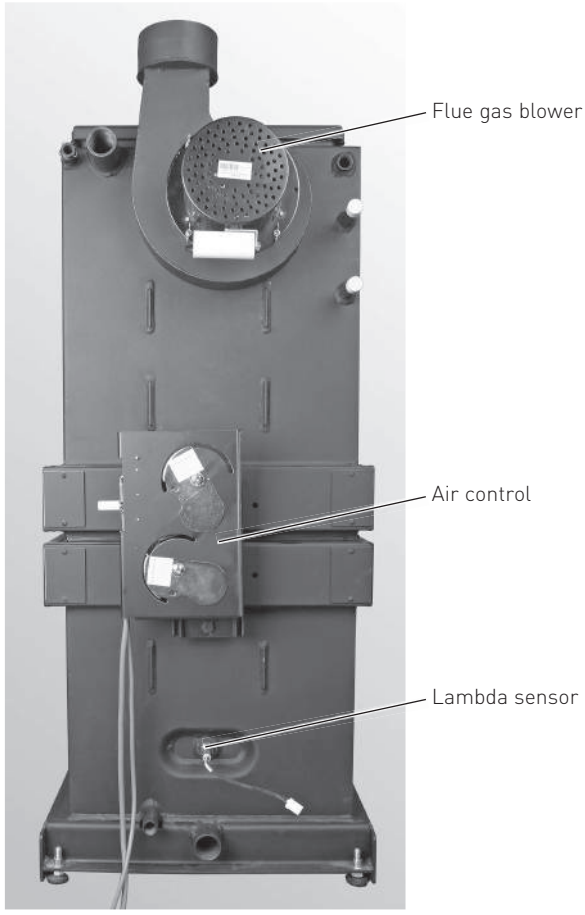


Fig. 15 Flue gas blower, air control and lambda sensor installed

2.4.7 Installing the lighting door with automatic ignition

- Only for LogWIN with automatic ignition (accessories) see separate installation instructions (included).

Fig. 16 Automatic ignition

Fig. 17 Lighting door with automatic ignition

2.4.8 Installing the carburisation gas duct

– Screw in 2 fasteners for the carburisation gas duct over the heating door on the boiler, see Fig. 18, 19.
– Attach the carburisation gas duct and screw tight with 2 M8 nuts – Fig. 20.

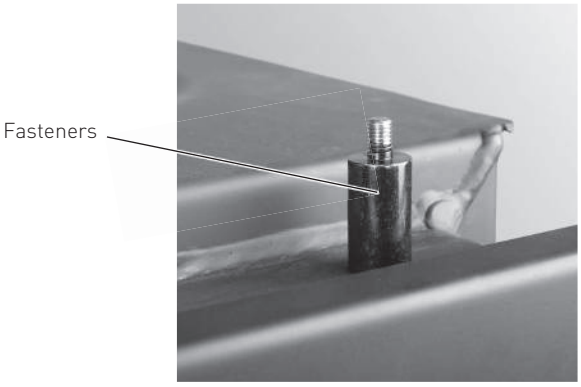


Fig. 18 Installing 2 fasteners for carburisation gas duct

Fig. 19 2 fasteners installed

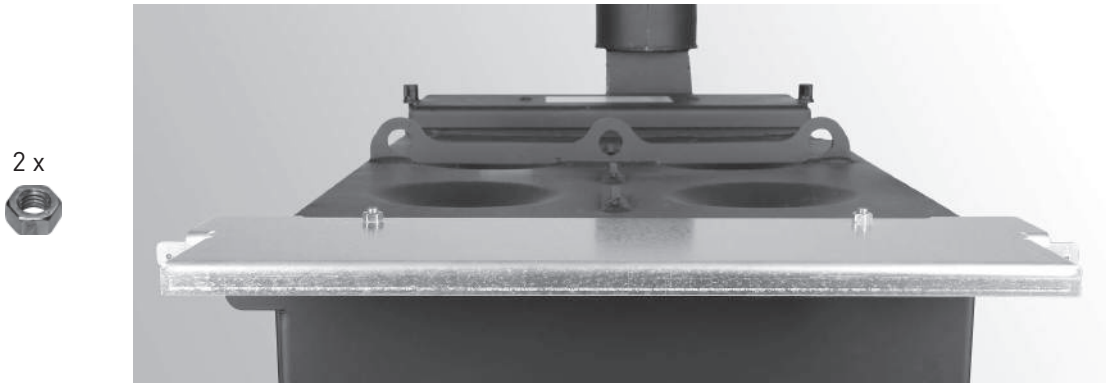


Fig. 20 Installing the carburisation gas duct

2.4.9 Installing the insulation

– Attach insulation on top and sides, see Fig. 21, 22.

Fig. 21 Installing insulation

Fig. 22 Installing insulation

2.4.10 Installing the side panels

– Screw in 2 screws on the bottom of each side of the base **halfway** – Fig. 23. Release the side panels and hook them into the installed screws at the bottom (Fig. 24, 25) and loosely screw the top on with one self-tapping screw and one saw tooth ring for earthing – Fig. 26.

Note!

Only screw the cladding screws on loosely at first; do not adjust the cladding (gap size) and tighten all screws until all cladding parts have been installed.

2 each of

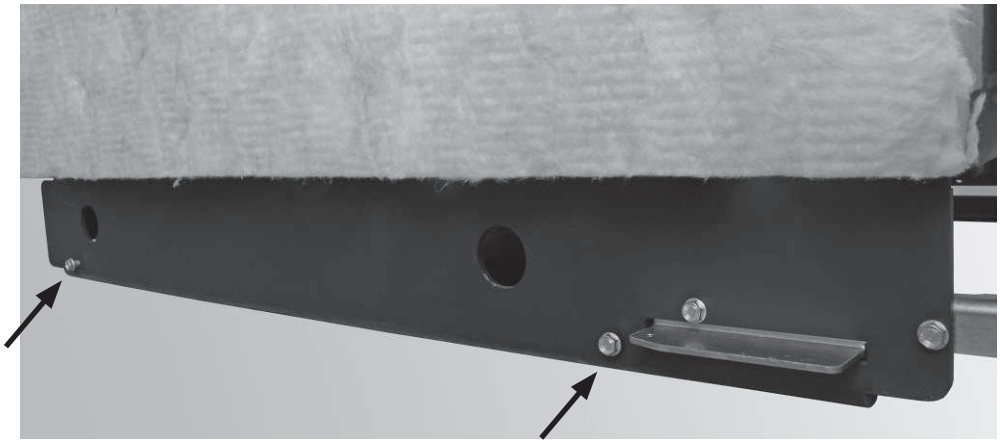


Fig. 23 Screw in 2 screws on each side of the base

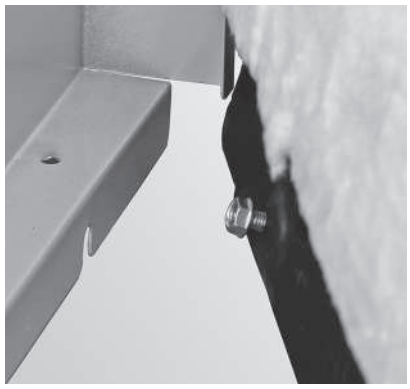
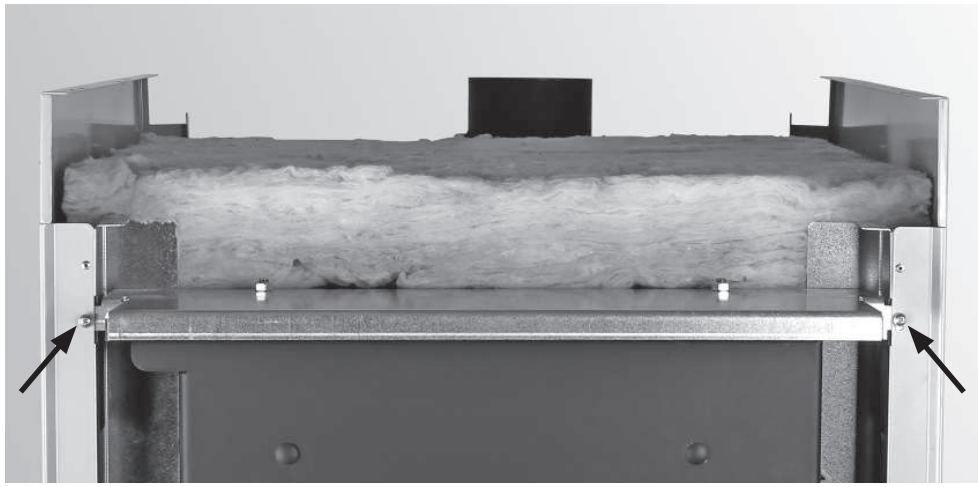


Fig. 24 Hooking the side panels in with screws at the bottom

Fig. 25 Hooking in side panels

1 x



1 x

Fig. 26 Screws the side panels on loosely at the top front.

2.4.11 Installing the control panel

– Place the control panel on the side panels and attach it to each with 2 self-tapping screws and 1 saw tooth ring for earthing – Fig. 27.

– Attach the cable channels at left and right (feed-through at rear) with a drilling screw on each side to the front of the control panel; leave some overhang over the cladding at the rear (approx. 5 mm) – Fig. 27. Cable routing, see Fig. 33 and Item 3.

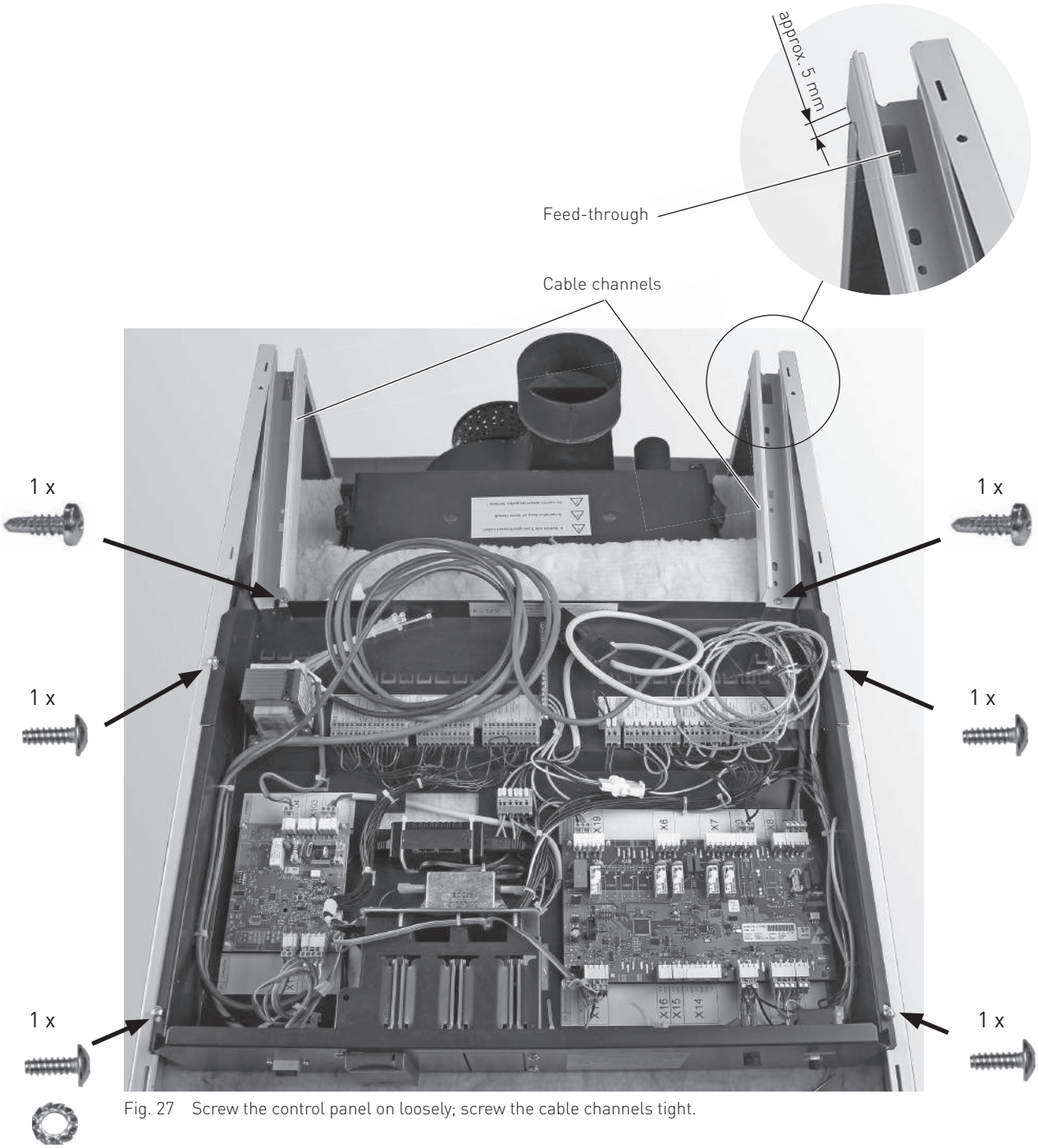


Fig. 27 Screw the control panel on loosely; screw the cable channels tight.

2.4.12 Installing the thermocontrol sensor

– Route the thermocontrol sensor (green cable) at the front of the right side panel down and feed through – Fig. 28, 29. But first bend the cut-out (feed-through) at the bottom of the side panel out of the way.
– Insert the sensor over the ash door in the front and into the protective tube; hook the spring in place – Fig. 30, 31.

Information!

Pull the protruding cable from the thermocontrol sensor back into the side panel or control panel. The cable may not hang out in order to keep it from becoming caught in the ash door.

Fig. 28 Inserting the thermocontrol sensor at the top

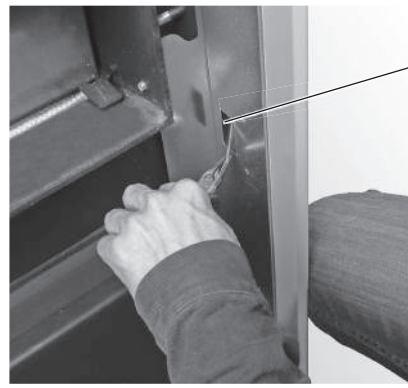


Fig. 29 Threading through thermocontrol sensor

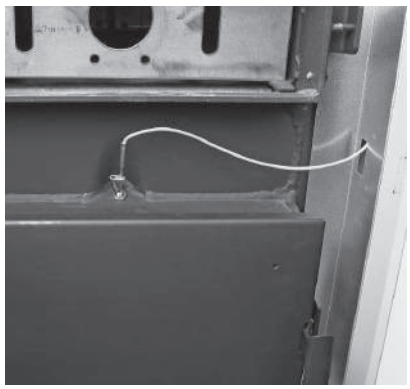


Fig. 30 Securing the thermocontrol sensor with spring, pulling cable back

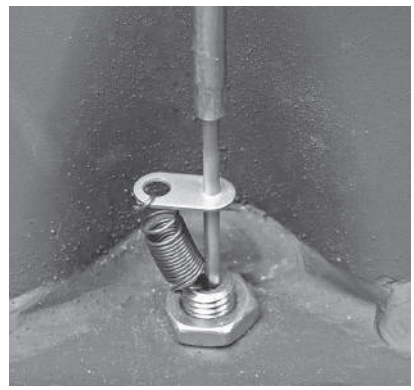


Fig. 31 Thermocontrol sensor with spring

2.4.13 Installing the thermocontrol sensor cover

– Attach the thermocontrol sensor with 4 self-tapping screws – Fig. 32.

2 each of
2 each of
In Betrieb alle Türen geschlossen halten!
In operation keep all doors closed!
En service laisser les portes fermées !

Fig. 32 Attaching the cover over the thermocontrol sensor with 4 screws

2.4.14 Installing the mains connection and sensor

– Route the mains cable and sensor lines in the right cable channel toward the back – Fig. 33. Plug the flue gas sensor (accessories) in the control panel to Plug X11 and also route it in the right cable channel toward the back. Route all sensor lines through the feed-through in the cable channel downward.

– Screw the power socket to the rear of the side panel with two 2.9 x 16 self-tapping screws – Fig. 34.

Insert boiler sensor and safety temperature limiter sensor (STB) as far as possible into the immersion sleeve and secure them with the sensor guard to prevent them from slipping out – Fig. 34.

– Install the flue gas sensor with protective tube (accessories) into the flue outlet as described in the installation instructions – Fig. 34.

– Route both cables for the flue gas blower in the cable channel stoward the back – Fig. 34.

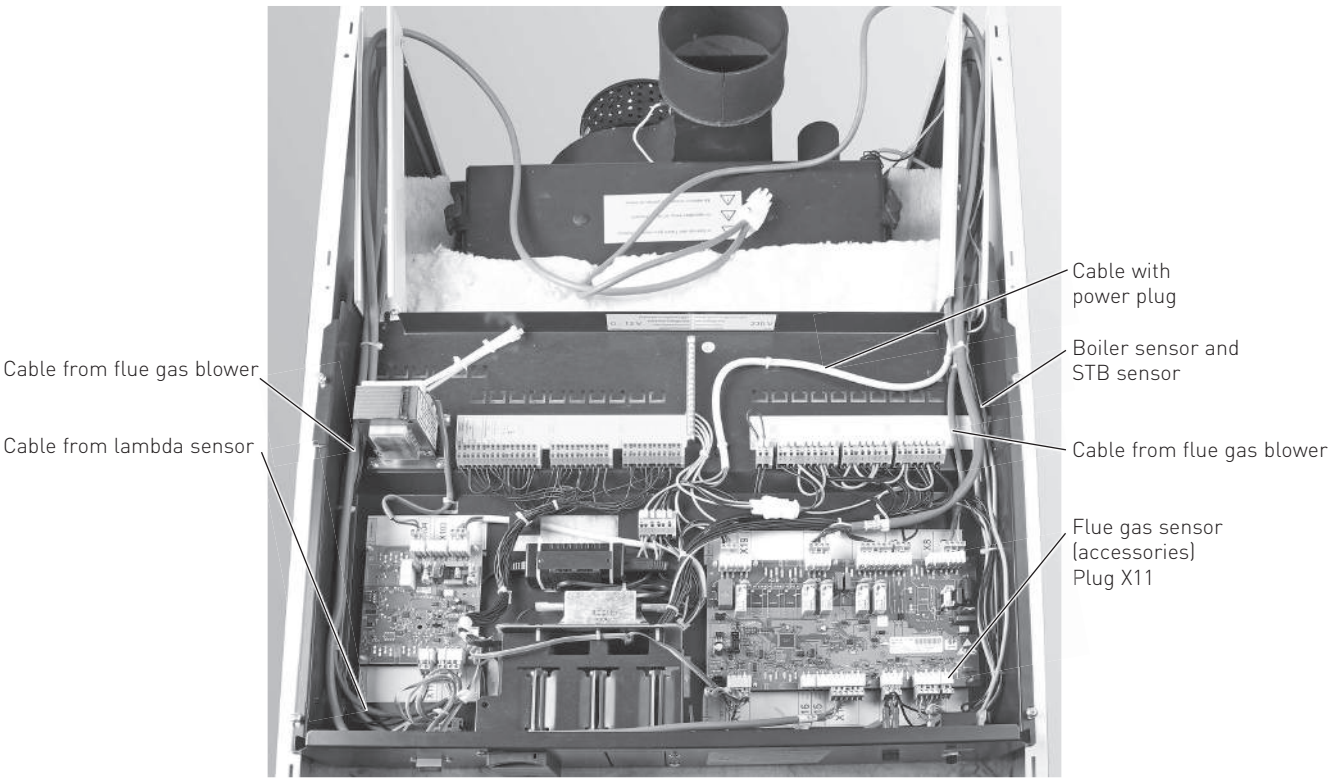


Fig. 33 Control panel, cable routing

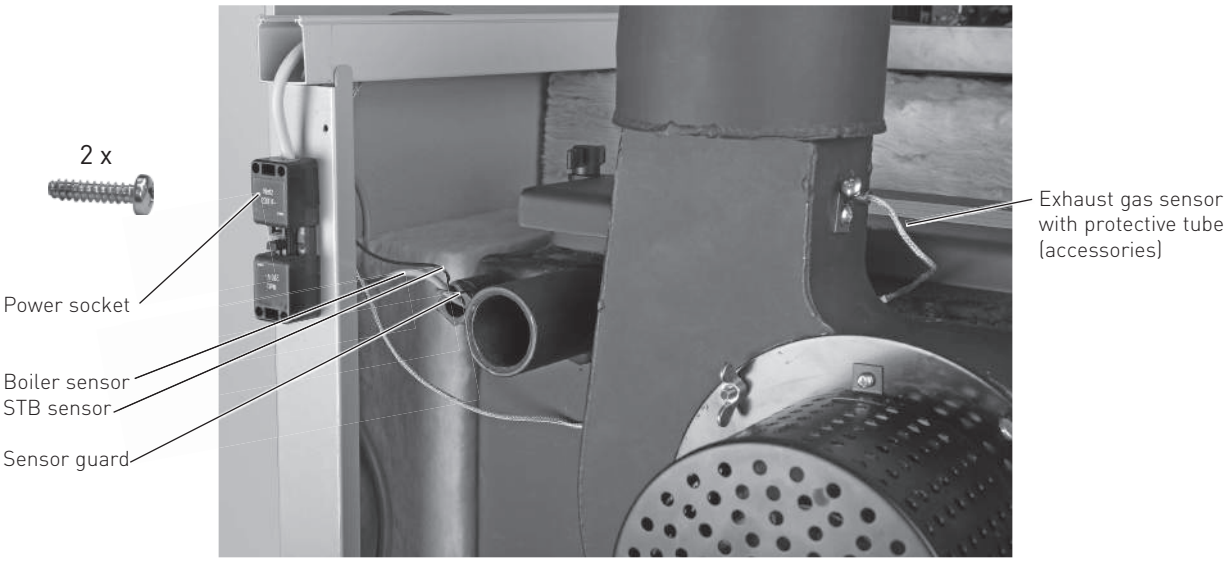


Fig. 34 LogWIN Klassik – rear side

- Route both cables from the air control in the side panels upward via the cable channel feed-through into the control panel as shown in Fig. 35 and connect as shown in Fig. 36.
- Route the lambda sensor cable from the control panel via the cable channel feed-through in the side panel downward and connect to the lambda sensor – Fig. 36.

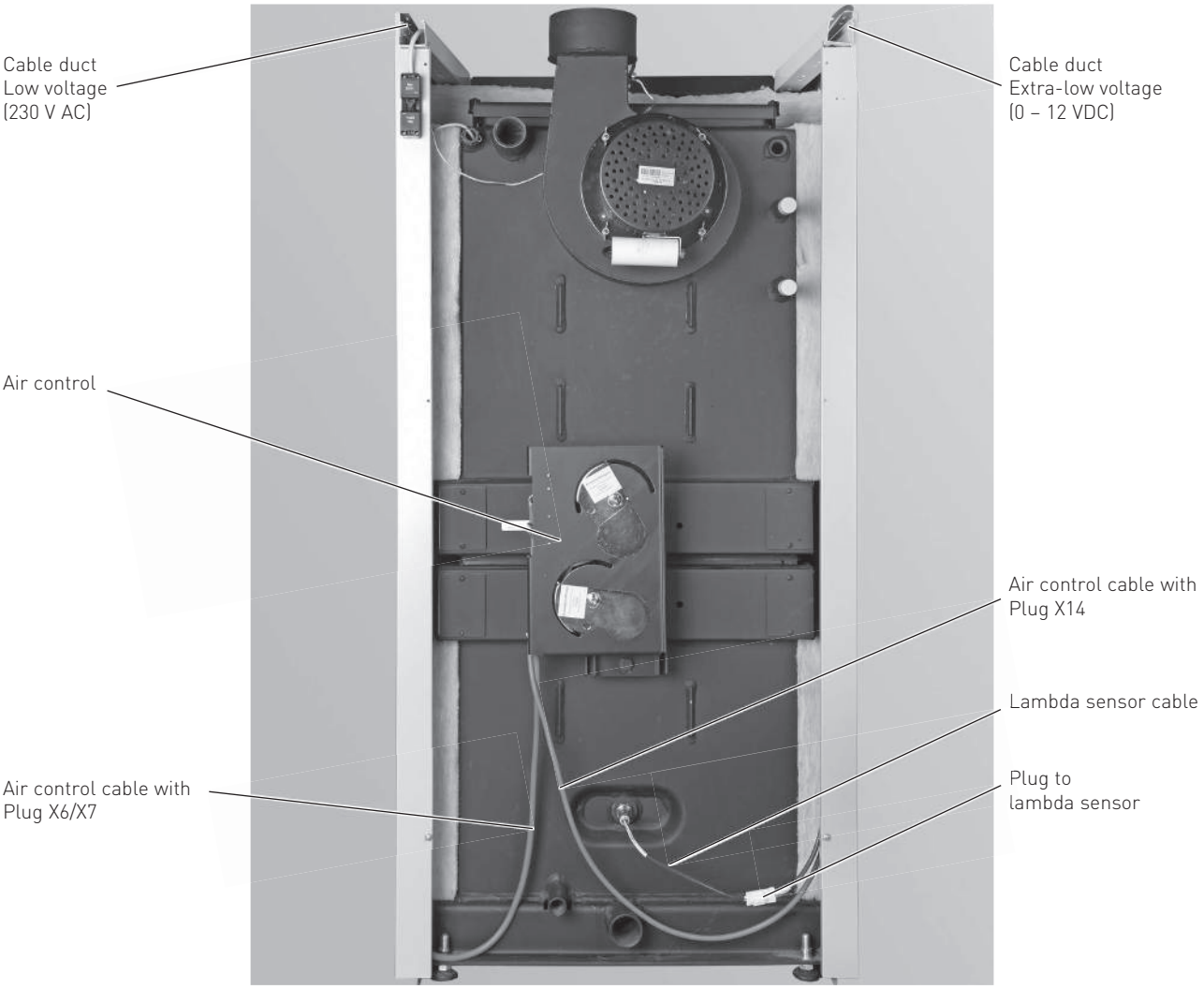


Fig. 35 LogWIN Klassik with rear panels removed – rear view

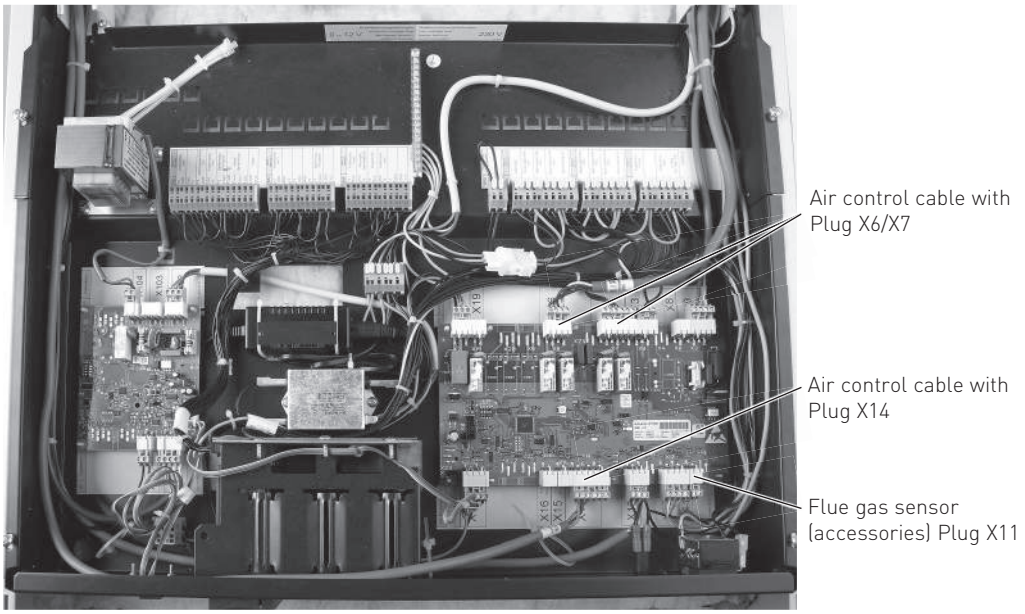


Fig. 36 LogWIN Klassik control panel – top view

2.4.15 Installing insulation for the rear panel

– Install insulation on top and bottom as shown in Fig. 37.

Fig. 37 Installing insulation on the rear panel

2.4.16 Installing the rear panels

– If no adapter for the flue gas blower (accessories) is being used, break off the cut-out at the top of the back panel – Fig. 37.
large cut-out = exhaust pipe insulated
small cut-out = exhaust pipe not insulated
do not break off = adapter for flue connection installed

– Fasten the rear panel at top and bottom with 4 screws each – Fig. 39.

– Connect the blower plug to the flue gas blower – Fig. 39.

Fig. 38 If no adapter for the flue connection is being used, break off the cut-out

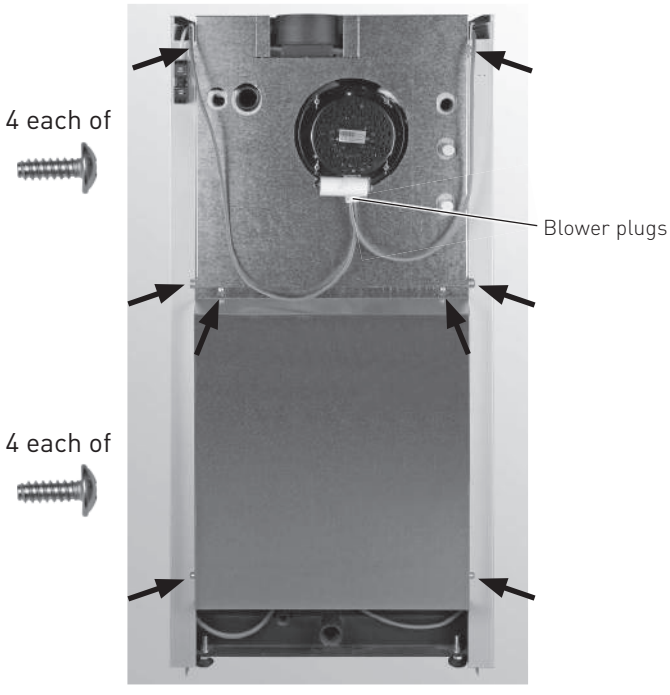


Fig. 39 Fitting the rear panels

2.4.17 Installing the blower housing on the adapter

– Only for LogWIN with flue connection adapter (accessories)

– First screw the 4 included M8 x 16 hexagon screws into the blower housing from the inside, the attach the blower housing with seal, 4 nuts and washers to the adapter – Fig. 40.

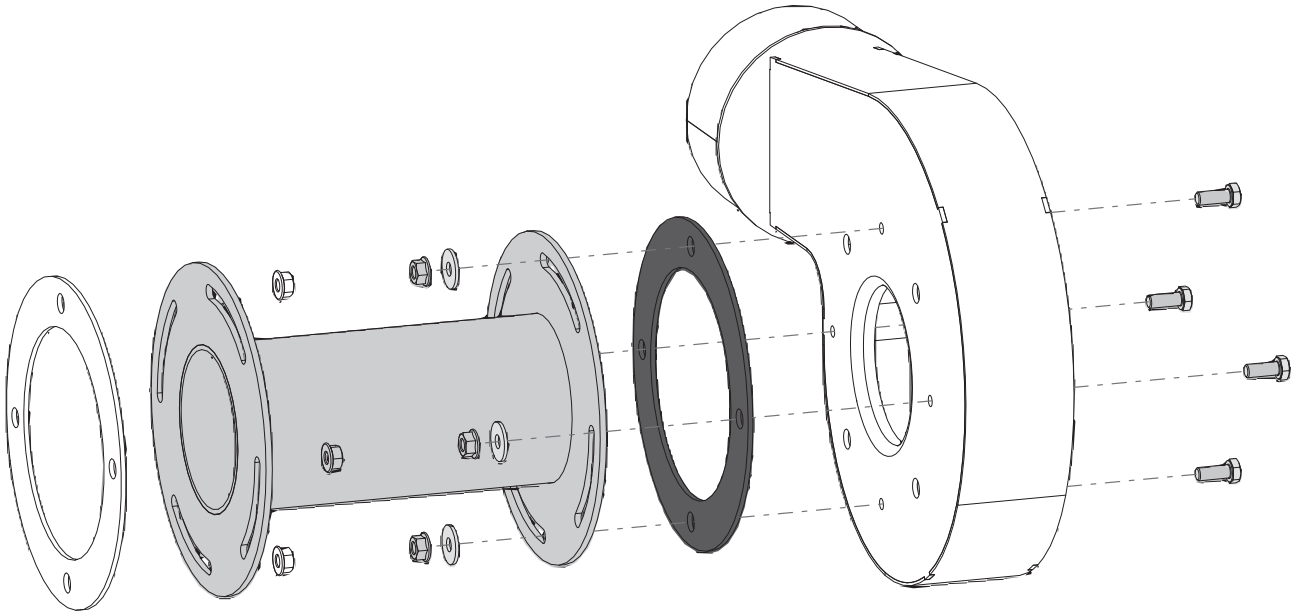


Fig. 40 Installing the blower housing on the adapter

2.4.18 Installing the lever for cleaning heating surfaces

– Depending on accessibility, either install lever for cleaning heating surfaces on the left or right side. Punch through the cut-out, insert lever through opening in side panel (Fig. 41) and slide inwards through the cleaning heating surfaces axle (limit stop must face upwards – Fig. 42) and secure with screws (inserted only) – Fig. 42.

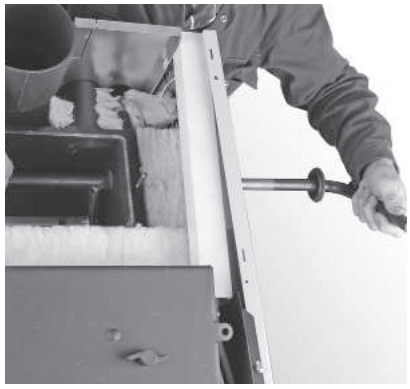


Fig. 41 Punching through the cut-out, inserting lever for cleaning heating surfaces through opening

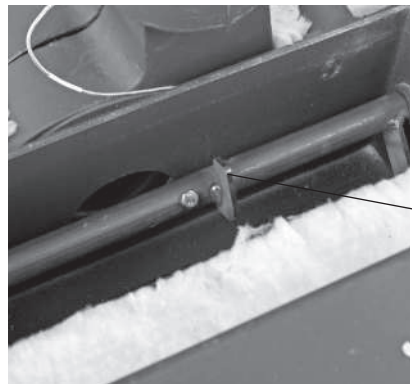


Fig. 42 Sliding lever through axle and securing with screw (inserted only)

2.4.19 Installing the control panel

- Before the control panel is installed, the InfoWIN cable must be routed from the control panelat the front left – Fig. 43.
- Route the cable from the door switch (on the control panel) at the front right into the control panel and connect Plug X15 – Fig. 44.
- Loosely screw the control panel to the side panels (2 x) and control panel (2 x) with self-tapping screws – Fig. 45.
- Connect the InfoWIN cable and route into the side panel – Fig. 45.

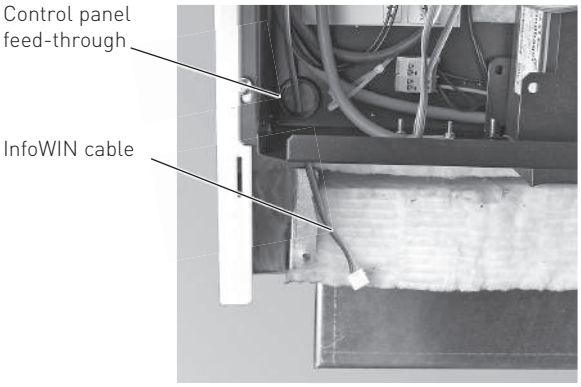


Fig. 43 Threading the InfoWIN cable through

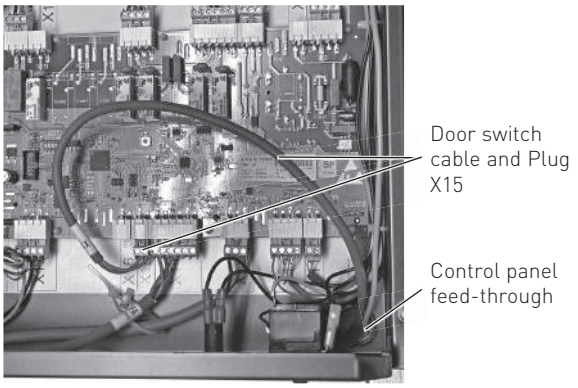


Fig. 44 Inserting the cable from the door switch and connecting to Plug X15.

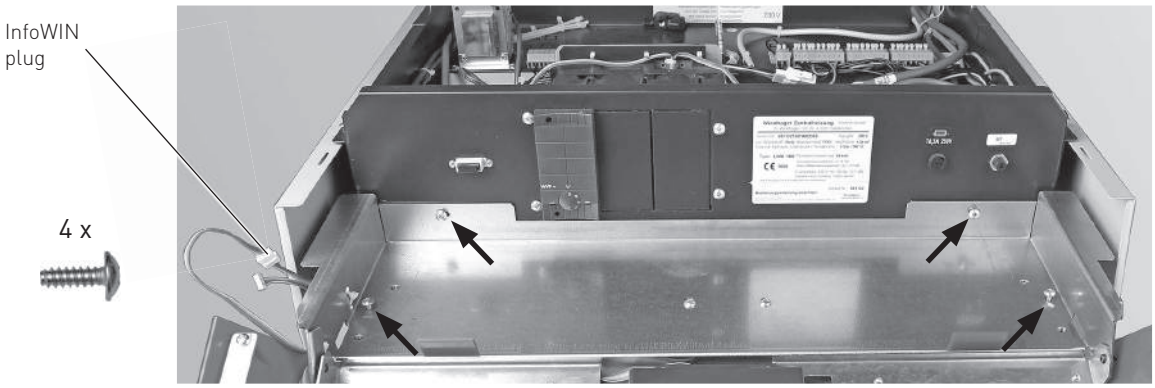


Fig. 45 Attach the control panel with 4 self-tapping screws, route InfoWIN cable.

2.4.20 Installing the cladding door

Note!

The cladding door and the boiler doors are designed for door catches on either the left or right. Standard delivery always includes door catches on the left. The catches on the cladding door and boiler doors must be on the same side.

Hook the cladding door in at the upper and lower door hinges (Fig. 46) and fasten the upper door hinge with 2 washers and M6x10 hexagon screws – Fig. 47.

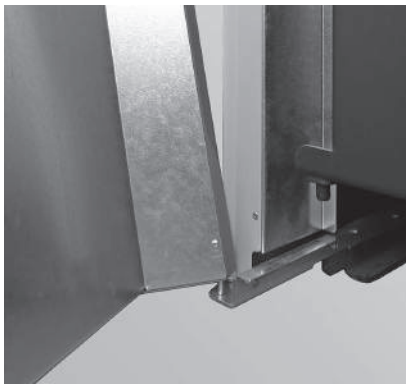


Fig. 46 Lower cladding door on door hinge

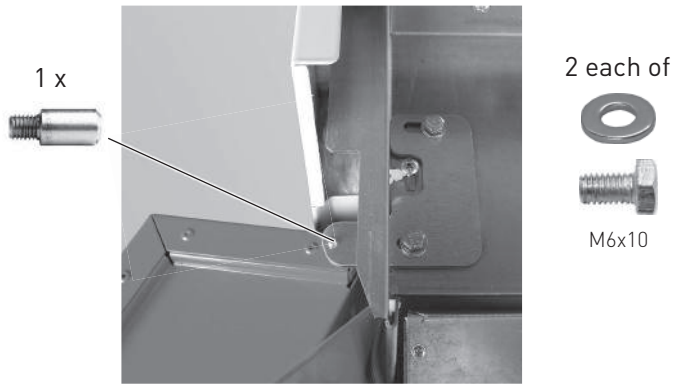


Fig. 47 Upper cladding door with door hinge

– Press 2 magnetic catches top/bottom into the side panel to align with the door catch side – Fig. 48.
– Install 2 magnet retainers top/bottom in the cladding door with 2 self-tapping screws each – Fig. 48.

Fig. 48 Screw the hinge into the cladding door with 2 self-tapping screws on each side, press 2 magnetic catches into place

2.4.21 Adjusting the cladding

– Adjust side panels, cladding door and control panel visually by the width of the cladding door or equal gap size and tighten all screws – Fig. 49.

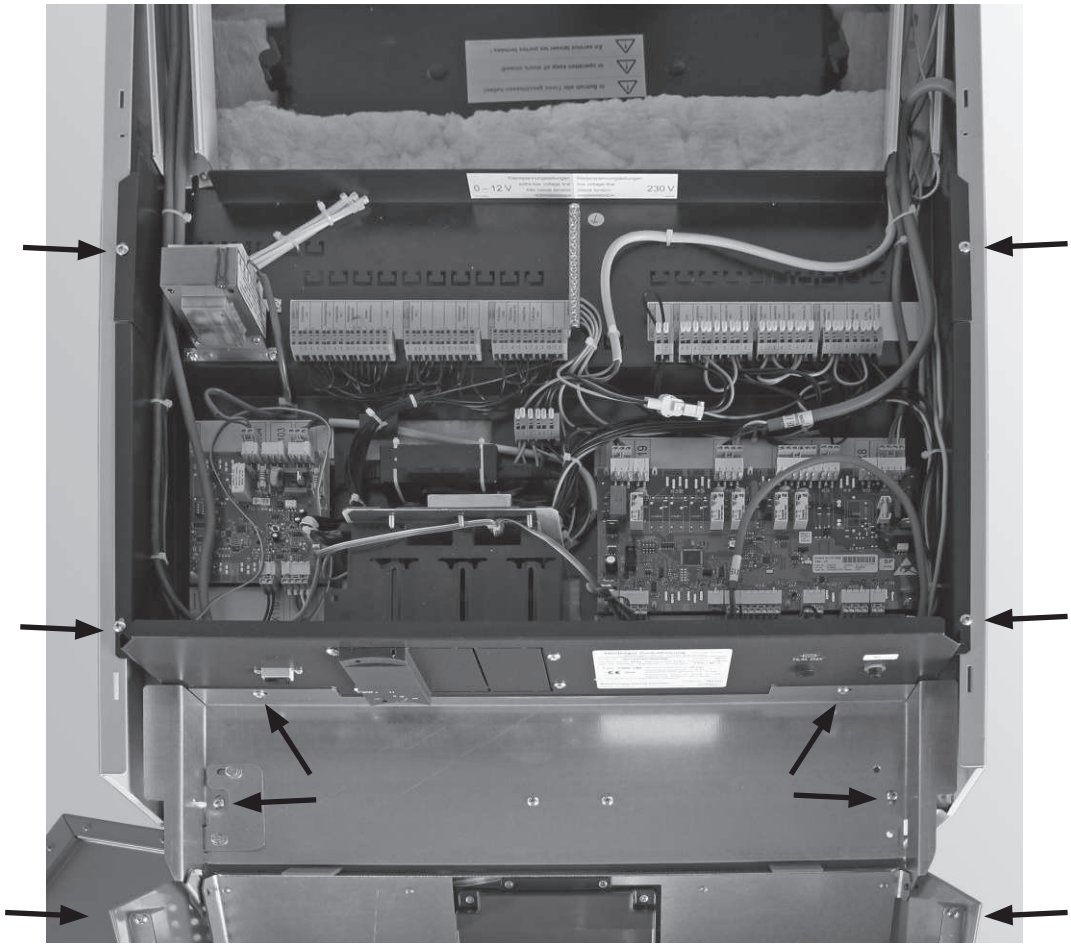


Fig. 49 Adjusting cladding, tightening all screws

2.4.22 Checking the cladding door switch

– When closing the cladding door, the cladding door switch must still have sufficient shifting travel after switching (audible clicking) before the cladding door is totally closed – Fig. 50. If necessary, use a screwdriver at the top inside the control panel to reset – Fig. 51.

Fig. 50 Door switch must click

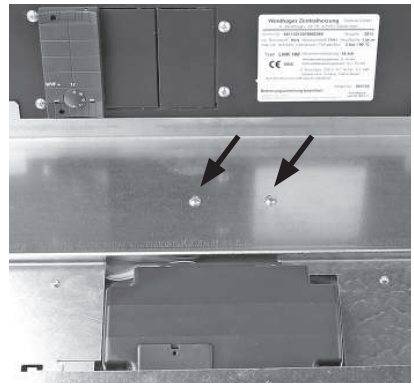


Fig. 51 Reset door switch with screws

2.4.23 Mounting the front boiler cover

– Hook the front boiler cover into the side panels (Fig. 52) and attach at rear with 2 self-tapping screws – Fig. 53.

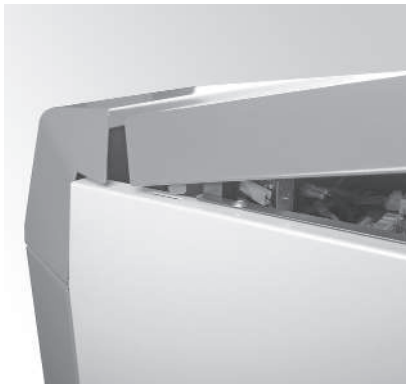


Fig. 52 Hinging in boiler cover

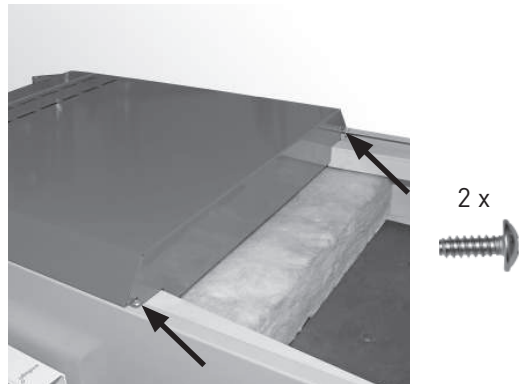


Fig. 53 Securing boiler cover in 2 places

2.4.24 Mounting the rear boiler cover

– If no adapter for the flue gas blower (accessories) is being used, break off the cut-out at the rear of the boiler cover – Fig. 54.
large cut-out = exhaust pipe insulated
small cut-out = exhaust pipe not insulated
do not break off = adapter for flue connection installed

– Hook the rear boiler cover into the slot provided on the side panel cladding – Fig. 55.

Fig. 54 Punching out the rear boiler cover

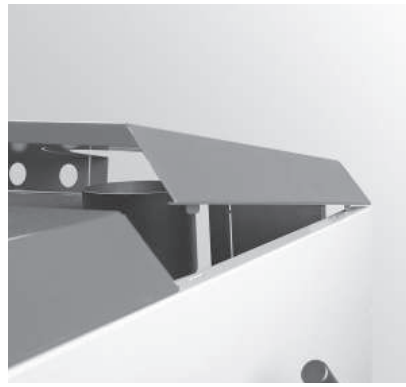


Fig. 55 Hooking in the rear boiler cover

2.4.25 Instructions, cleaning and operating implements

– Install the hanger with the instructions folder, cleaning and operating implements on a side panel of the boiler (Fig. 56) or on a wall in the boiler room/installation room.

– Keep ash pan under boiler.

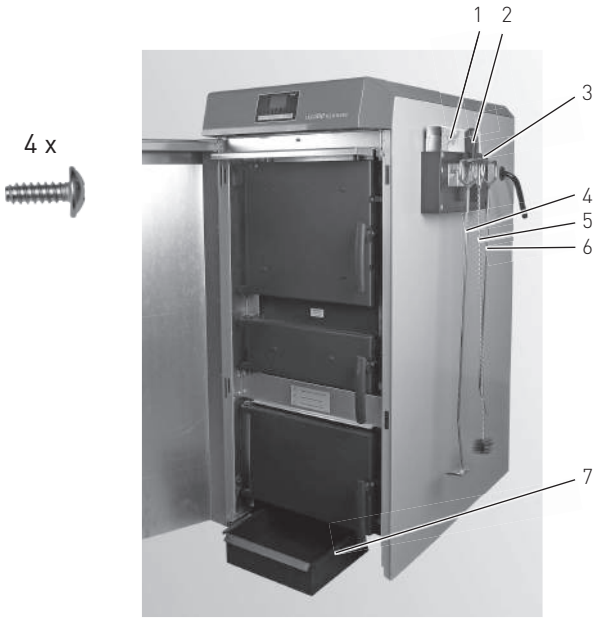


Fig. 56 Fitting hanger, ash pan under boiler

Supplied as standard:

1..... Instructions
4..... Scratcher
7..... Ash pan

Optional accessory: cleaning kit EWK 020:

3..... Hanger (for installation on the wall or boiler side panel)
2..... Spatula
5..... Cleaning brush
6..... Poker

2.4.26 Installing the exhaust pipe

a) Install the exhaust pipe upward to the flue (45° is the ideal angle). Maximum exhaust pipe length to flue 3 m.

Information!

Any section of this exhaust line that only rises slightly (up to 30°) or is horizontal is not allowed to be more than 1 m in length.

b) Avoid 90° bends, 45° bends are better

c) Do not push the exhaust pipe too far into the flue.

d) Do not seal the exhaust pipe completely into the flue. Connection with flexible exhaust pipe inlet into the flue. The vacuum fan can cause sound transmissions that create noise pollution.

e) The entire exhaust line should be sealed (incl. cleaning aperture) because there can be positive pressure in the exhaust pipe for a short period during the starting phase.

f) Insulate the exhaust pipe with at least 30 mm insulation!

g) A draught limiter is needed if the maximum draught (see technical data in section 4.4.) is exceeded during operation.

Note!

We would recommend fitting outside the flue around ½ m below where the exhaust pipe intersects with the flue.

2.4.27 Installing the thermal process safeguard

Connecting thermal process safeguard to thermal safety device

a) The thermal process safeguard and cleaning T-piece must still be accessible after installation.
b) The drain must be visible in order to check the function, therefore use a discharge funnel.
c) It must not be possible to block the connection manually.

Connection according to EN 303-5:

Minimum connection pressure of the thermal safety device: 2 bar.
It must not be possible to block the connection manually.

1.....Pressure reducing valve (only with CW connection of more than 6 bar)
2.....Dirt trap
3.....Thermal process safeguard (opens at approx. 95 °C)
4.....Cleaning T-piece
5.....Discharge funnel
6.....Immersion sleeve for the sensor of the thermal process safeguard
7.....Boiler return
8.....Boiler feed

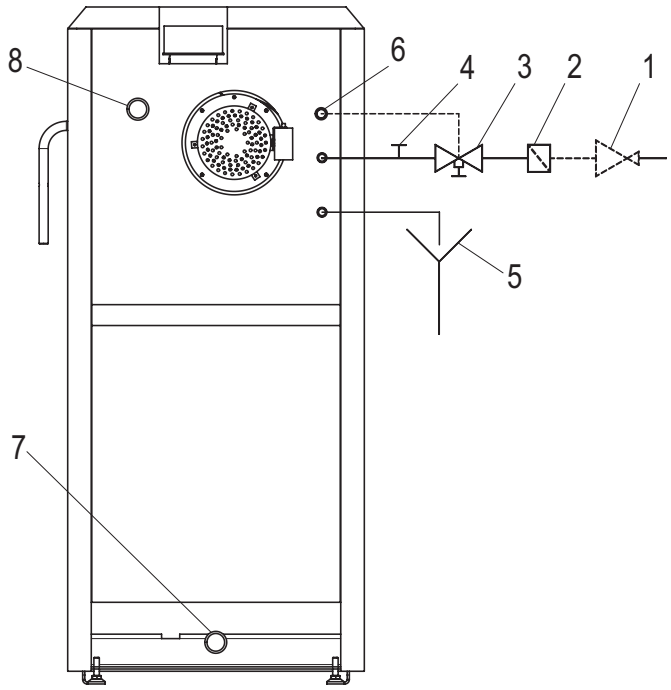


Fig. 57 Thermal safety device connection

3. For the Electrician

3.1 Electrical connections

The boiler and related accessories are designed to be installed only in dry areas (protection type IP 20). Installation of electrical components may only be performed by a qualified technician. The regulations and specifications of ÖVE, VDE, SEV and local ordinances must be followed.

Attention!

- The phases of the 230 V electrical power supply must be connected correctly, otherwise the blower might still be live even after the fuse has blown.
- The mains connection must be protected against short circuit with a 13 A delayed-action fuse.

We recommend using fine-wire PVC sheathed cables, e.g., H05VV-F (YMM-J) with a 3 x 1.5 mm^2 nominal crosssection.

The boiler is pre-wired and internally fused with a T 6.3 A fine-wire fuse to protect against short circuit.

By special order, up to 3 MESplus modules (including boiler sensor) will be installed in the control panel and wired at the factory – Fig. 58. if there are more than 3 modules, they are installed in the wall-mount casing (accessory: MES 004) and need to be electrically wired on site.

Maximum MESplus module switching capacity: Relay outputs: 230 V AC, 6 A (2 A inductive), 50 Hz
WVF and B-PLM modules with X1/X2 contact: Solid-state relay: 230 V AC, 1 A

The electrical rating is dependent upon the number of modules installed in the unit, that is, the number of actuators powered (pumps, mixing valves, etc.).

In areas with increased power surge risk (e.g., lightning strikes in regions prone to storms), we recommend installation of an appropriate surge protector.

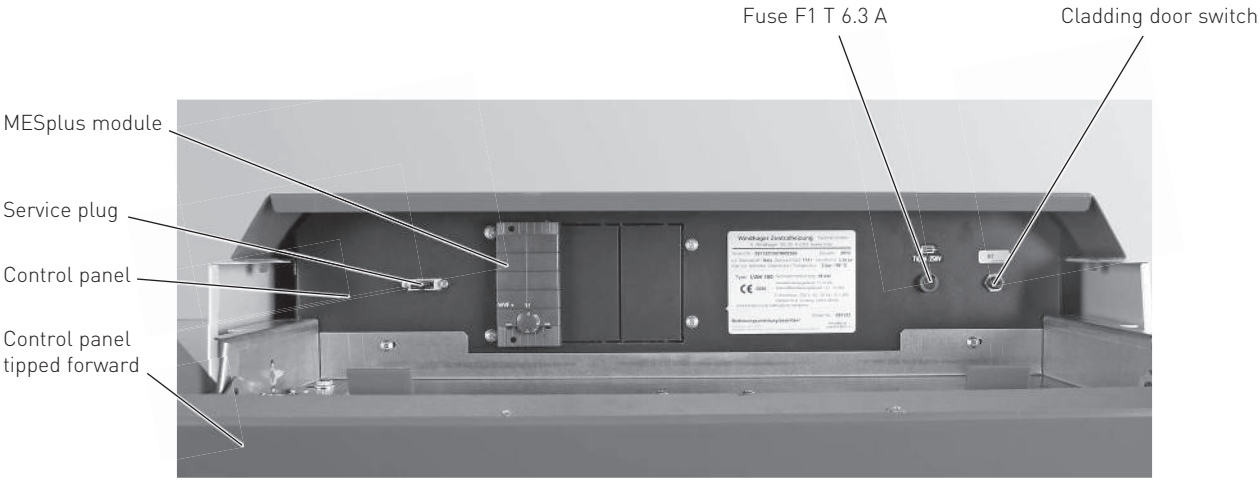


Fig. 58 Control panel LogWIN Klassik

Information!

Electrical cables must not touch heating and exhaust pipes, nor must they come in contact with non-insulated boiler components. They are to be sufficiently braced and provided with a protective tube.

All electrical connections are located in the control panel. The control panel at the front contains the LogWIN main board while the control panel at the rear contains the connection terminals (screwless spring-type terminals) for connecting the MESplus control.

– Remove rear boiler cover (Fig. 59), loosen 2 screws from front boiler cover (Fig. 60) and lift up cover and pull off to the rear – Fig. 61.

Fig. 59 Removing the rear boiler cover

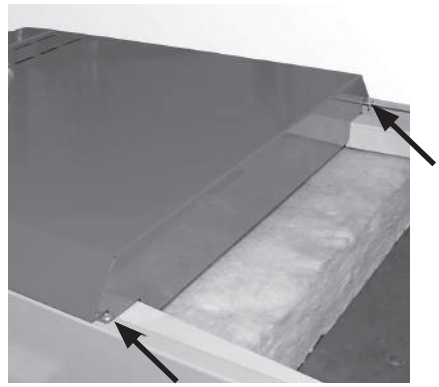


Fig. 60 Loosen 2 screws

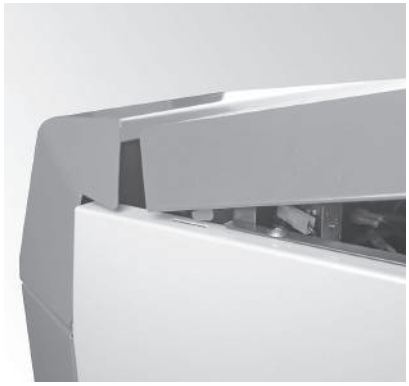


Fig. 61 Lifting boiler cover and pulling off to the rear

– Check 4-pin plug on InfoWIN cable, route to left side from control panel as necessary (see also 2.4.19), connect and route in side panel – Fig. 62.

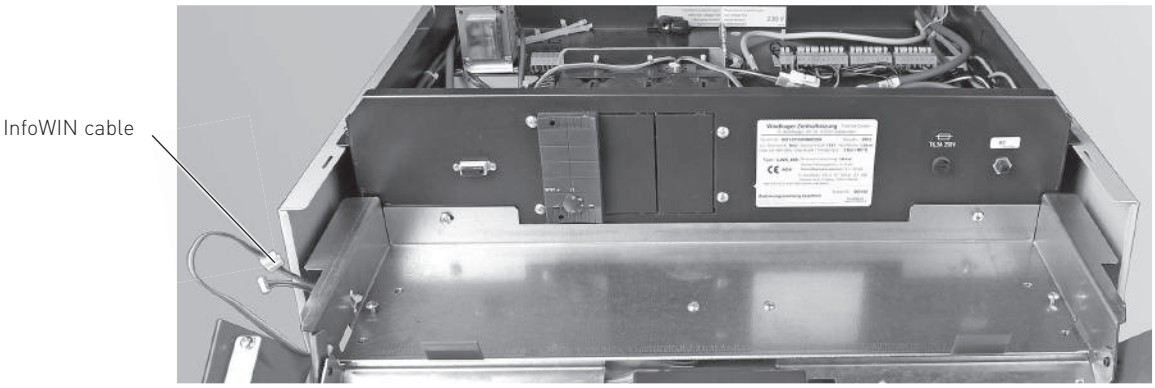


Fig. 62 Connect InfoWIN cable if necessary and route in side panel

3. For the Electrician

– Make sure that the plugs for the door switch, flue gas sensor (accessories) and air control are correctly connected in the control panel. Cables and plugs are inscribed – Fig. 63.

– The connections for the MESplus system control are on the terminal blocks (screwless spring-type terminals) at the rear in the control panel and should be connected with fine-wire PVC sheathed cables – Fig. 63.

Information!

Be sure to note the separate wiring of the extra-low voltage line (0–12 VDC) and low-voltage line (230 V AC)! Route cables in the cable ducts available – Fig. 63.

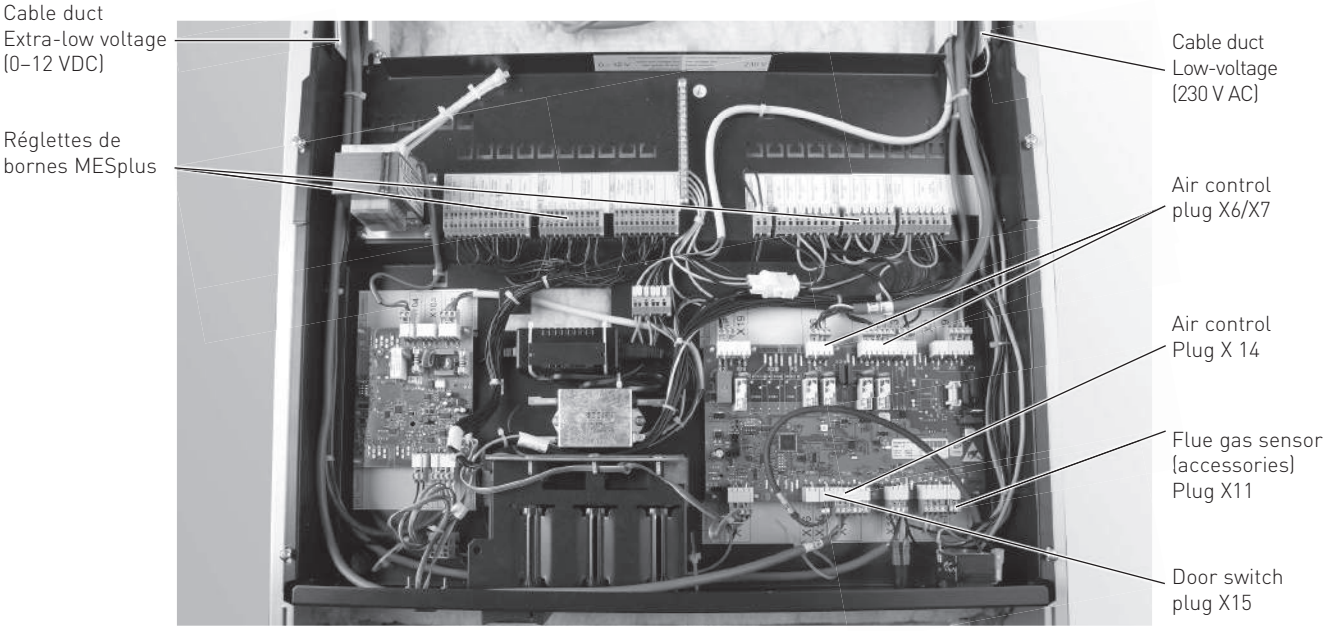


Fig. 63 Control panel open, connecting plugs – front view

Information!

Electrical cables should be routed in the cable ducts intended for this purpose and are not allowed to be routed over the cleaning cover. The space above the cover must be accessible for cleaning.

Connecting automatic ignition (accessory)

see separate assembly instructions provided.

Information!

After connecting the cables, remove any remaining assembly materials (e.g., wire cuttings) from the control panel.

– Hook the front boiler cover into place (Fig. 64) and attach with 2 screws – Fig. 65.

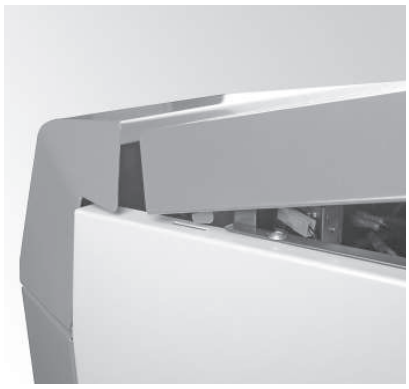


Fig. 64 Hooking in the front boiler cover

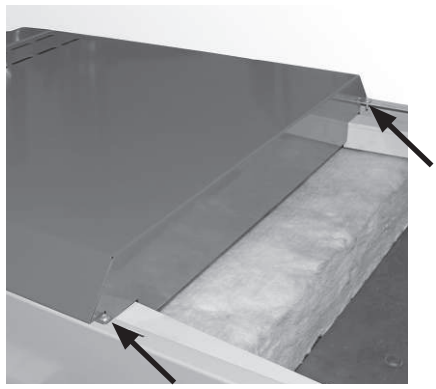


Fig. 65 Securing with 2 screws

– Insert the rear boiler cover into the slot provided on the side panel – Fig. 66.
– Connect or plug in the mains power plug at the rear of the boiler – Fig. 67.

Fig. 66 Hooking in the rear boiler cover

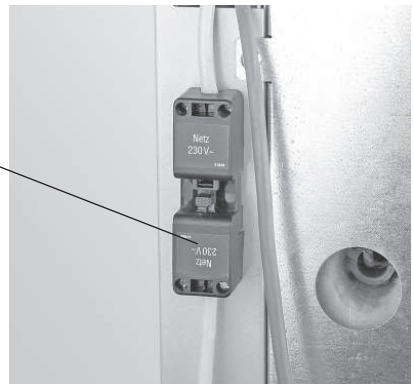


Fig. 67 Insert or connect the power plug

4. For the Service Technician

4.1 Start-up and operating instructions

The Windhager Customer Service or Partner Customer Service will start up the boiler and will familiarize the customer with the system operator and cleaning of the boiler. Start-up and maintenance are part of the guarantee requirements of the "warranty conditions" – see also section 1.4.
We recommend that you obtain a maintenance service contract.

4.2 Service and repair work

Service and repair may be performed only by appropriately qualified technicians.

Attention!

De-energise the boiler before opening the control panel for service or repair purposes. Unplug power plug – Fig. 68.

Switching off the on/off button on the InfoWINplus does not mean the boiler and its accessories are completely without power! When replacing system components (pumps, mixing valves, etc.) prevent all power input (e.g. by removing the mains power plug).

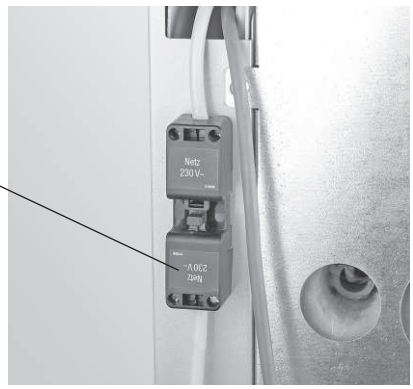


Fig. 68 Disconnecting plugs

4.3 Checking and servicing the thermal process safeguard

(Please inform your customer)

Attention!

The function of the thermal process safeguard must be checked once a year by a technician and the amount of limescale in the thermal safety device must be checked. If there is limescale in the thermal safety device then it must always be removed.

- Press the red cap against the valve (Fig. 69) > Water must flow out into the funnel.– Little outflow at funnel > Limescale in thermal safety device (pump limescale remove – e.g. formic acid – through the thermal safety device).
- Thermal process safeguard dripping > Clean the seal on the piston and valve seat. If the seal is damaged > Renew the piston.

  Note: There is no need to remove the fitting for this purpose!

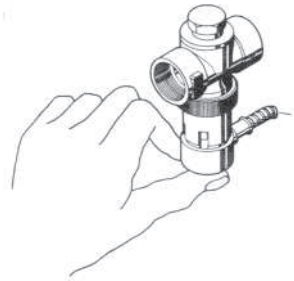


Fig. 69 Thermal process safeguard,
Press the red cap against the valve

4.4 Technical data for calculating the flue gas system acc. to EN 13384-1 (for LWK 180–300)

LogWIN Klassik wood gasification boiler	Formula symbols	Unit	LWK 180		LWK 250		LWK 300	
			min.	max.	min.	max.	min.	max.
Values in practical operation (Average between two cleaning intervals)								
Nominal thermal output	Q_N	kW	13	18	13	25	13	30
Nominal heat load (firing thermal output)	Q_B	kW	14,3	19,3	14,3	27,2	14,3	33,8
Volume concentration of CO_2	σ (CO_2)	%	14,7	14,8	14,7	14,6	14,7	14,5
Flue gas mass flow rate	$\dot{m}$	kg/s	0,0078	0,0107	0,0078	0,0151	0,0078	0,0184
Flue gas temperature	T_W	°C	110	160	110	180	110	195
Necessary feed pressure	P_W	Pa	5	10	5	10	5	10
Flue gas connection diameter	Ø	mm	130	130	130	130	130	130

4.5 Technical data – General (for LWK 180–300)

LogWIN Klassik wood gasification boiler		Unit	LWK 180	LWK 250	LWK 300
Boiler class according to EN 303-5:2012			5		
Nominal thermal output range		kW	13–18	13–25	13–30
Fuel type to EN 303-5:2012	permissible		A, C2[1)]	A, C2[1)]	A, C2[1)]
Fuel water content	permissible	%	15–25	15–25	15–25
Burn duration at rated load/part load	Beech Spruce	h	5,8 / 8,3 3,7 / 5,3	4,2 / 8,3 2,7 / 5,3	3,9 / 8,3 2,5 / 5,3
Filling chamber	W x D x H Beech/spruce	mm l kg	394 x 562 x 640 145 37 / 24		
Filling door dimensions	W x H	mm	430 x 397		
Feed pressure during operation (draught requirement)	Necessary Maximum	mbar	0,10 0,20		
Boiler temperature control range		°C	62–87		
Boiler set temperature		°C	80[2)]		
Return temperature	min.	°C	61		
Water-side resistance	ΔT = 20 °K ΔT = 10 °K	mbar	2,1 7,2	3,4 14,0	5,5 20,0
Operating pressure	max.	bar	3		
Test pressure		bar	4,5		
Boiler water volume		l	114		
Weight of boiler	net	kg	499		
Minimum transport weight[3)]		kg	430		
Installation dimensions	W x D x H	mm	588 x 1120 x 1437		
Minimum installation dimensions[4)]	W x D x H	mm	588 x 967 x 1340		
Electrical power consumption	Operation Standby Igniting	W	43 7 2000	49 7 2000	53 7 2000
Values from type test with beech	**Testing office TÜV SÜD Munich, test report no.: 1348-00/13)**				
Boiler efficiency		%	91,5	90,7	90,1
Flue gas temperature	rated load part load	°C	123 97	150 97	170 97

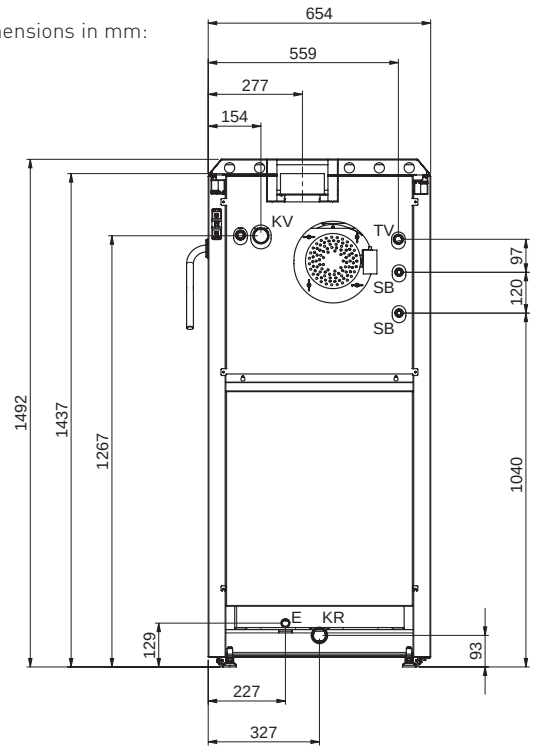
1) see operating manual, Fuels section
2) ssee point 2.2.1.
3) by removing parts which are easy to disassemble (e.g. doors, hook-in plates, burnthrough plates, heating surface cleaning etc.).
4) without doors, cleaning cover and flue gas blower

4.6 Dimensional sketches

Flue gas blower directly on boiler, flue connection at top

All dimensions in mm:

Rear view



Left view

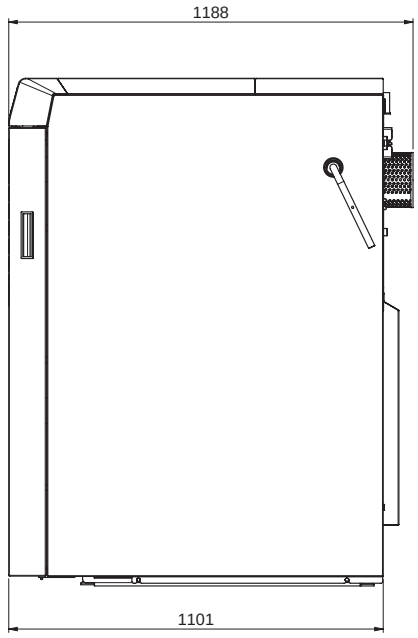


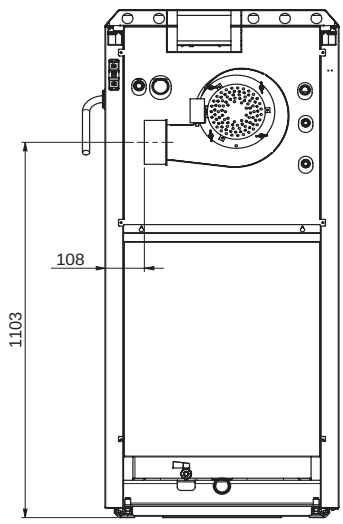
Fig. 70 LogWIN Klassik flue gas blower directly on boiler

KV . . . . . Boiler feed (5/4" pipe)
KR . . . . . Boiler return (5/4" pipe)
TV . . . . . Thermal valve sensor (1/2" sleeve)
SB . . . . . Thermal safety device (1/2" tube)
E . . . . . Discharge

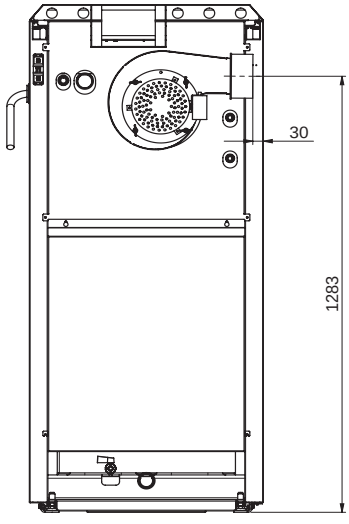
Blower housing with adapter, flue connection steplessly adjustable from left to right

All dimensions in mm:

Rear view



Rear view



Left view

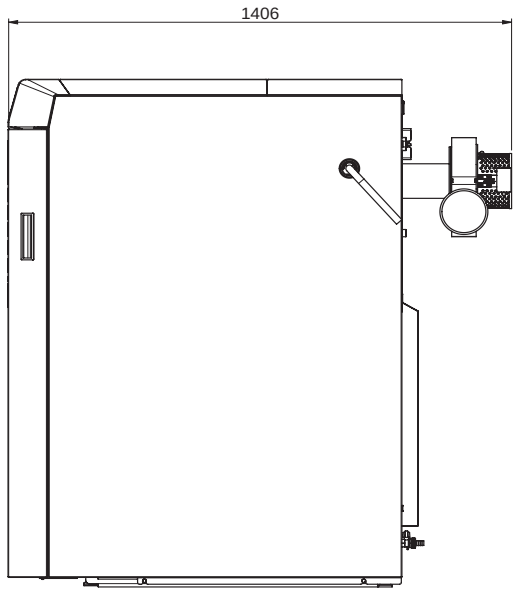


Fig. 71 LogWIN Klassik flue gas blower with adapter on boiler

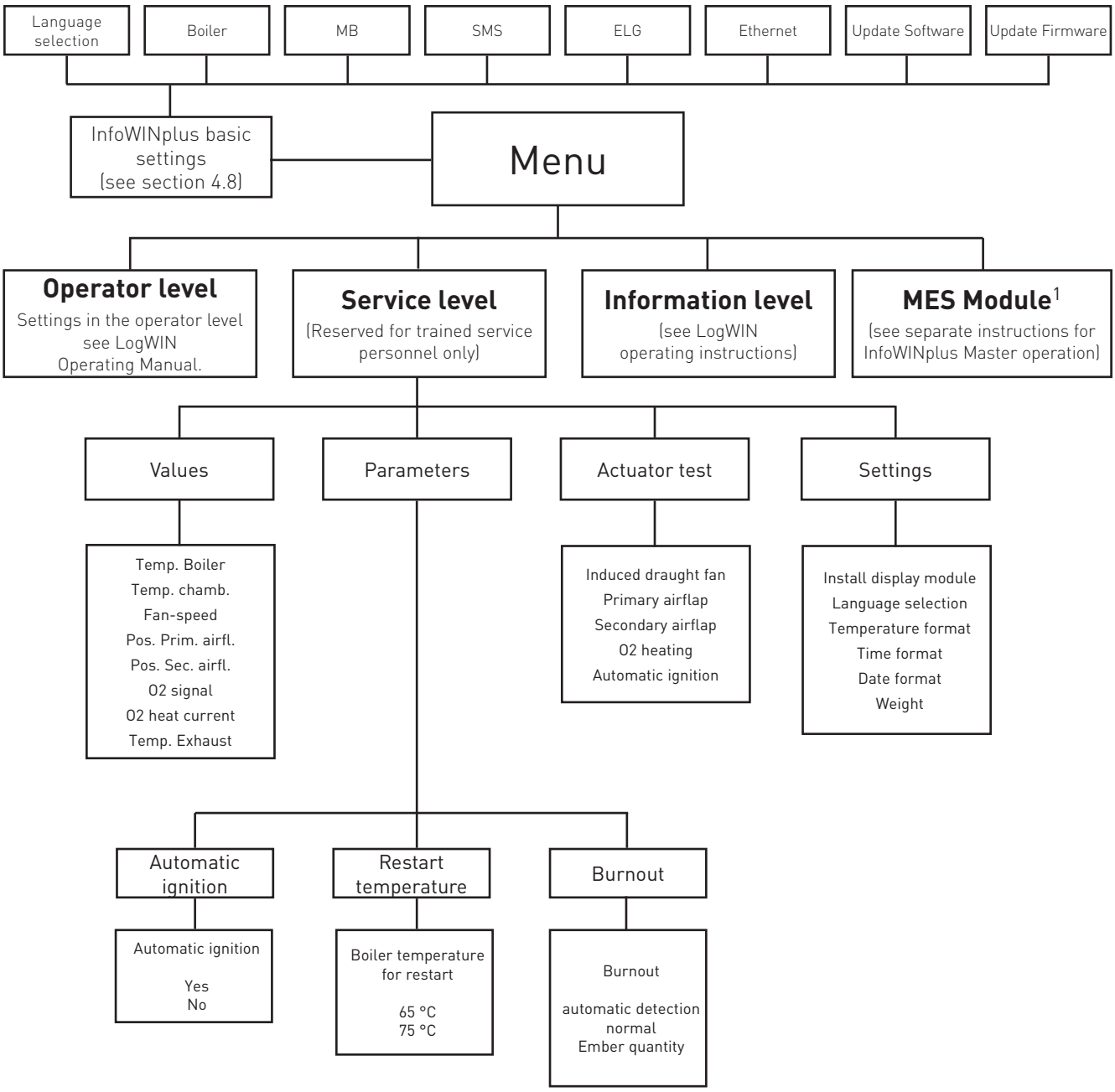
4.7 Service level

Values, restart temperature, burnout, language and actuator test can be displayed and modified on the Service level.

Information!

Only trained service personnel may perform system modifications on the Service level.

Structure on the Service level:



1 only displayed when an MESplus control is present and this has been adjusted by a trained service technician in the basic settings.

Service level

Pressing the **Menu** button (Fig. 72) shows the „Operator level“, „Service level“, „Information level“ and „MES Module[1]“ in the display – Fig. 73.

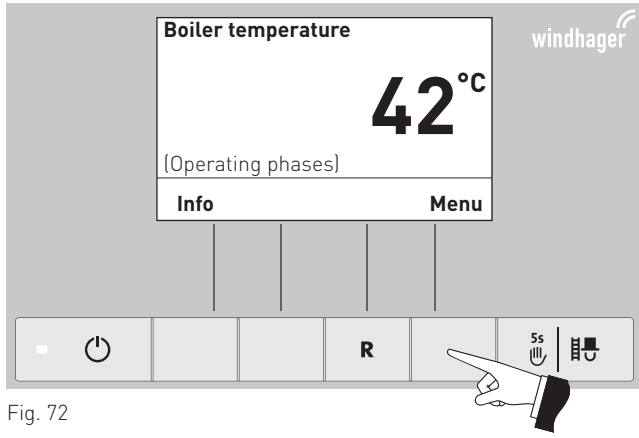


Fig. 72

Use the **arrow** buttons to select the “Service level” submenu – Fig. 73.

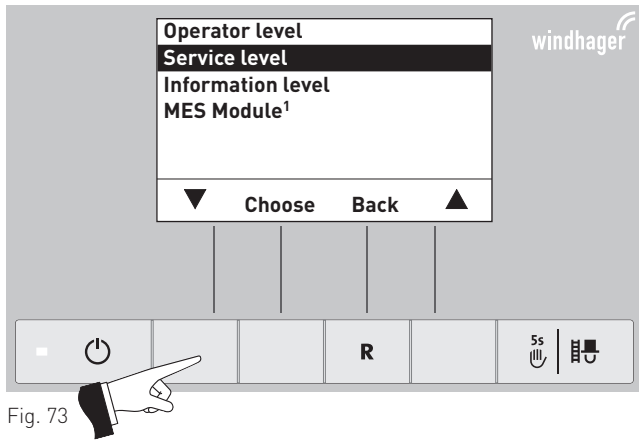


Fig. 73

Press and hold the **Choose** button for 5 seconds (Fig. 74). The display shows „Service level only for trained service personnel“ – Fig. 75.

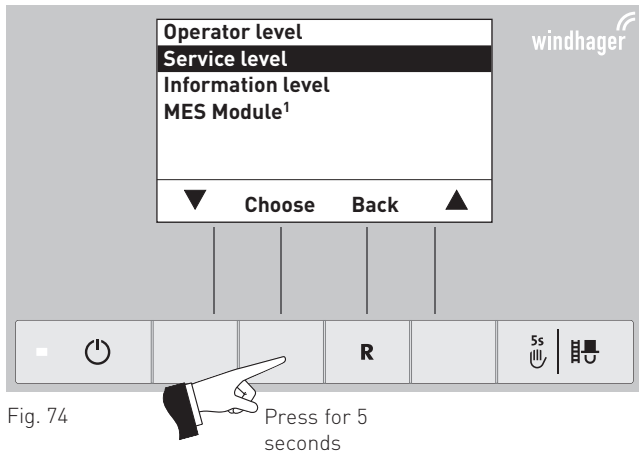


Fig. 74 Press for 5 seconds

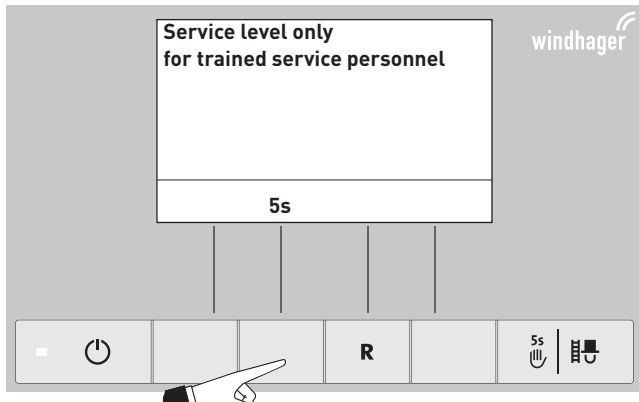


Fig. 75 Press for 5 seconds

1 only displayed when an MESplus control is present and this has been adjusted by a trained service technician in the basic settings.

Select the required item, „Values“, „Parameters“, „Actuator test“ or „Settings“ and confirm by pressing the **Choose** button – Fig. 76.
For further settings, see sections 4.7.1 - 4.7.4.

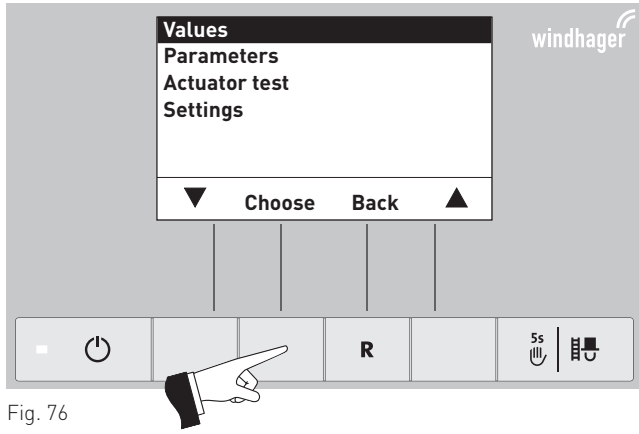


Fig. 76

The menu item or sub-menu item is exited by pressing the **Back** button or after a delay of 10 minutes – Fig. 77

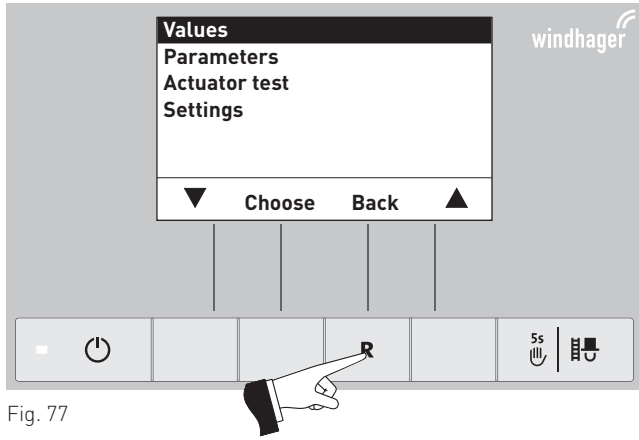


Fig. 77

4.7.1 Values

The following values are displayed:

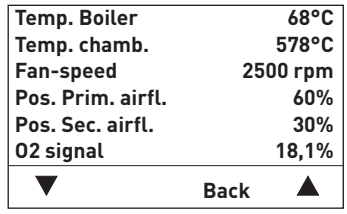


Fig. 78

Temp. Boiler
The current boiler temperature is displayed in °C.

Temp. chamb.
The current temperature in the combustion chamber is displayed in °C.

Fan-speed
The nominal speed of the blower is displayed in rpm.

Pos. Prim. airfl.
The position of the primary air choke is displayed in %.

Pos. Sec. airfl.
The position of the secondary air choke is displayed in %.

O2 signal
The O2 signal of the lambda sensor is displayed in %.

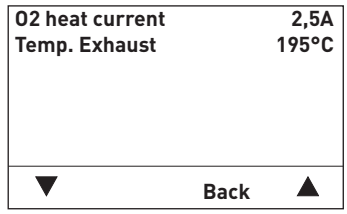


Fig. 79

O2 heat current
The O2 heat current of the lambda sensor is displayed in A.

Temp. Exhaust
The current flue gas temperature is displayed in °C.

4.7.2 Parameters

The following parameters can be selected with the **arrow** buttons, then confirmed using the **Choose** button.

- Automatic ignition
- Restart temperature
- Burnout

Automatic ignition

This adjuster is used to set whether electric ignition is present or not.

Factory setting: depending on condition upon delivery

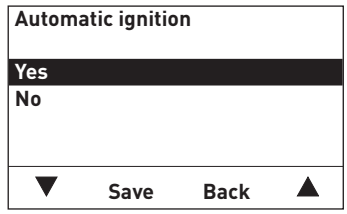


Fig. 80

Restart temperature

The blower switches off if the boiler temperature is too high. The restart temperature is the temperature at which the blower switches back on and the boiler resumes normal heating operation.

Factory setting: 75 °C
Possible settings: 65 °C or 75 °C

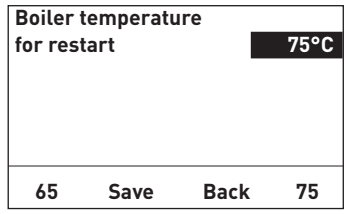


Fig. 81

Burnout

- **automatic detection**
  Burnout characteristics are determined by MESplus thermal distribution module WVF+. If only "Solid fuel operation" is set on the WVF+, "Burnout" with embers maintenance is undertaken. With all other settings on the WVF, a normal burnout is undertaken.
- **normal**
  A normal burnout is always undertaken, i.e. the wood is burnt as best as possible until no more remains without embers maintenance.
- **Ember quantity**
  Burnout with embers maintenance is always undertaken, i.e. basic embers are maintained to make it easier to light up again.

Factory setting: normal

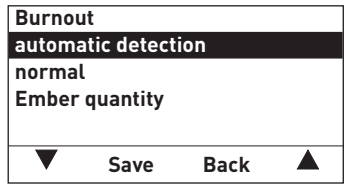


Fig. 82

4.7.3 Actuator test

The following actuators can be selected with the **arrow** buttons, then confirmed and started using the **Choose** button. The actuators are switched off again after 1 minute. A self-test is started at the end of an actuator test.

- Induced draught fan
- Primary airflap
- Secondary airflap
- O2 heating
- Automatic ignition

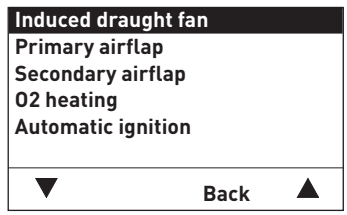


Fig. 83

4.7.4 Settings

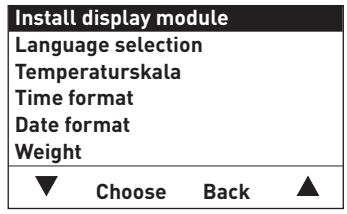


Fig. 84

This sub-menu contains the following settings:

- Install display module
- Language selection
- Temperature format
- Time format
- Date format
- Weight

Install display module

This is not required for the LogWIN.

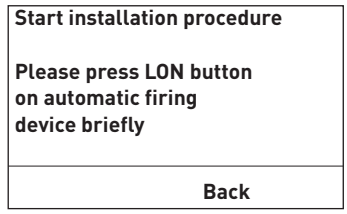


Fig. 85

Language selection

The InfoWINplus can show the display texts in various languages. The language required can be selected in this sub-menu.

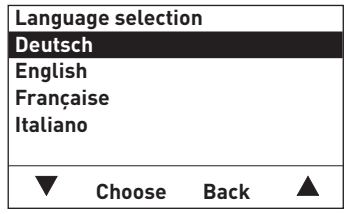


Fig. 86

Temperature format

All temperatures are displayed in the chosen format (e.g. 30.6 °C or 87.0 °F).

Factory setting: °C
Selection: °C and °F

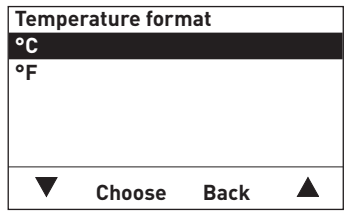


Fig. 87

Time format

The time is displayed in the chosen format (e.g. 14:12 or 02:12 PM).

Factory setting: 24 h
Selection: 24 h or 12 h

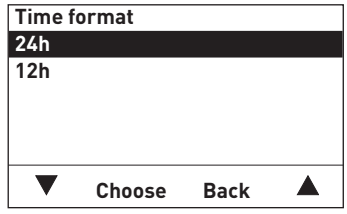


Fig. 88

Date format

The date is displayed in the chosen format (e.g. Wed 17.02.2010 or Wed 02/17/2010).

Factory setting: DD.MM.YYYY
Selection: DD.MM.YYYY
MM/DD/YYYY

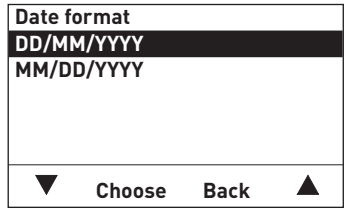


Fig. 89

Weight

The weight is displayed in the chosen format (e.g. 6.5 kg or 14.3 lbs).

Factory setting: t, kg
Selection: t, kg or tn. sh., lbs

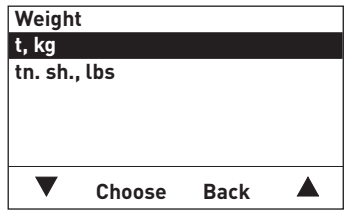


Fig. 90

4.7.5 Installation of MESplus modules

Display if an MESplus module is installed (connected) or uninstalled (disconnected)

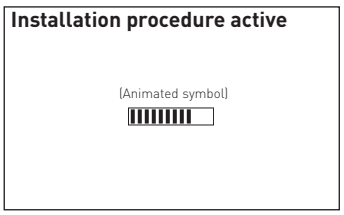


Fig. 91

4.8 InfoWINplus basic settings

The basic settings are used to

- set whether the InfoWINplus controls a wood or pellet boiler or whether it is solely used as master operation;
- switch the master operation functions on and off;
- activate/deactivate remote switching by text message.

The basic settings are undertaken in the factory before delivery as per the order.

Information!

Only trained service personnel may perform modifications in the basic settings.

The display switches to the basic settings when „Version ....“ (Fig. 93) is displayed and the button (shown in Fig. 93) is pressed for 5 seconds.

„Version ...“ is displayed,

- if the „R“ button is pressed for 5 seconds on a standard display – Fig. 92;
- if the InfoWINplus was de-energised and then switched on.

The following settings are available in the basic settings:

- Language selection
- Boiler
- MB
- SMS
- ELG
- Ethernet
- Update Software
- Update Firmware

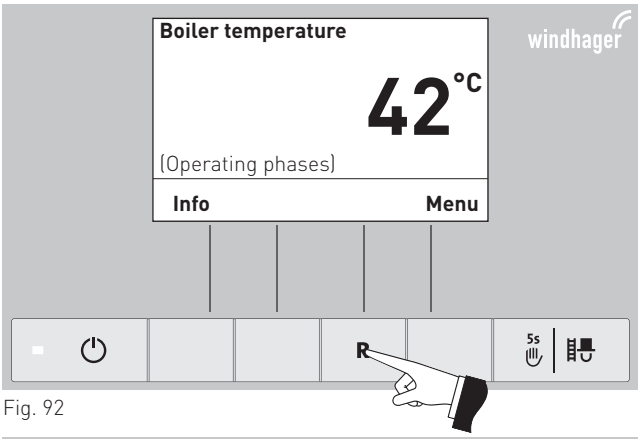


Fig. 92

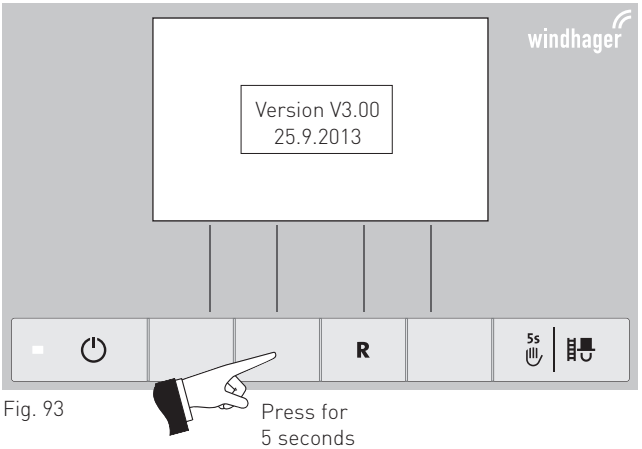


Fig. 93

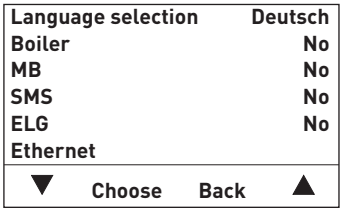


Fig. 94

Language selection

The InfoWINplus can show the display texts in various languages. The language required can be selected in this sub-menu.

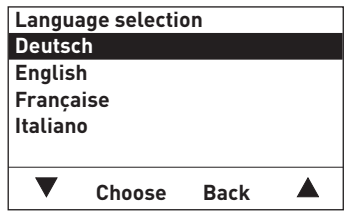


Fig. 95

Boiler

Setting to determine what kind of boiler the InfoWINplus controls, e.g. wood or pellet boiler or whether it is solely used as master operation.

Factory setting: is set in the factory before delivery as per the order.

Selection:
- Pellets: BioWIN, BioWIN XL, FireWIN, VarioWIN usw.
- Wood: LogWIN, SilvaWIN usw.
- Heating oil: JetWIN, EcoWIN
- No: No boiler, e.g. for MultiWIN, simply master operation for remote switching

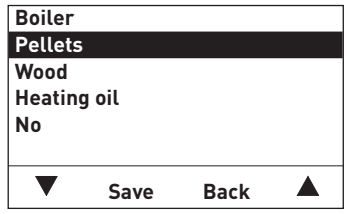


Fig. 96

MB (Master operation)

Setting to define whether MESplus system control is present.

Factory setting: is set in the factory before delivery as per the order.

Selection:
- yes: with MESplus system control
- no: no MESplus system control

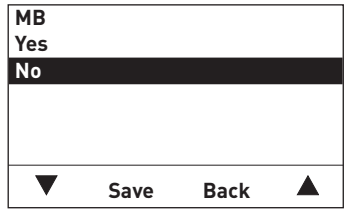


Fig. 97

SMS

is set in the factory before delivery as per the order.

Factory setting: wird je nach Bestellung werkseitg vor der Auslieferung eingestellt.

Selection:
- yes: with remote switching
- no: no remote switching

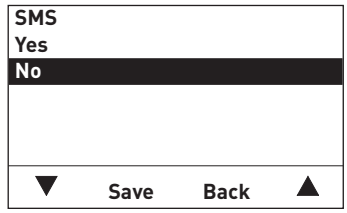
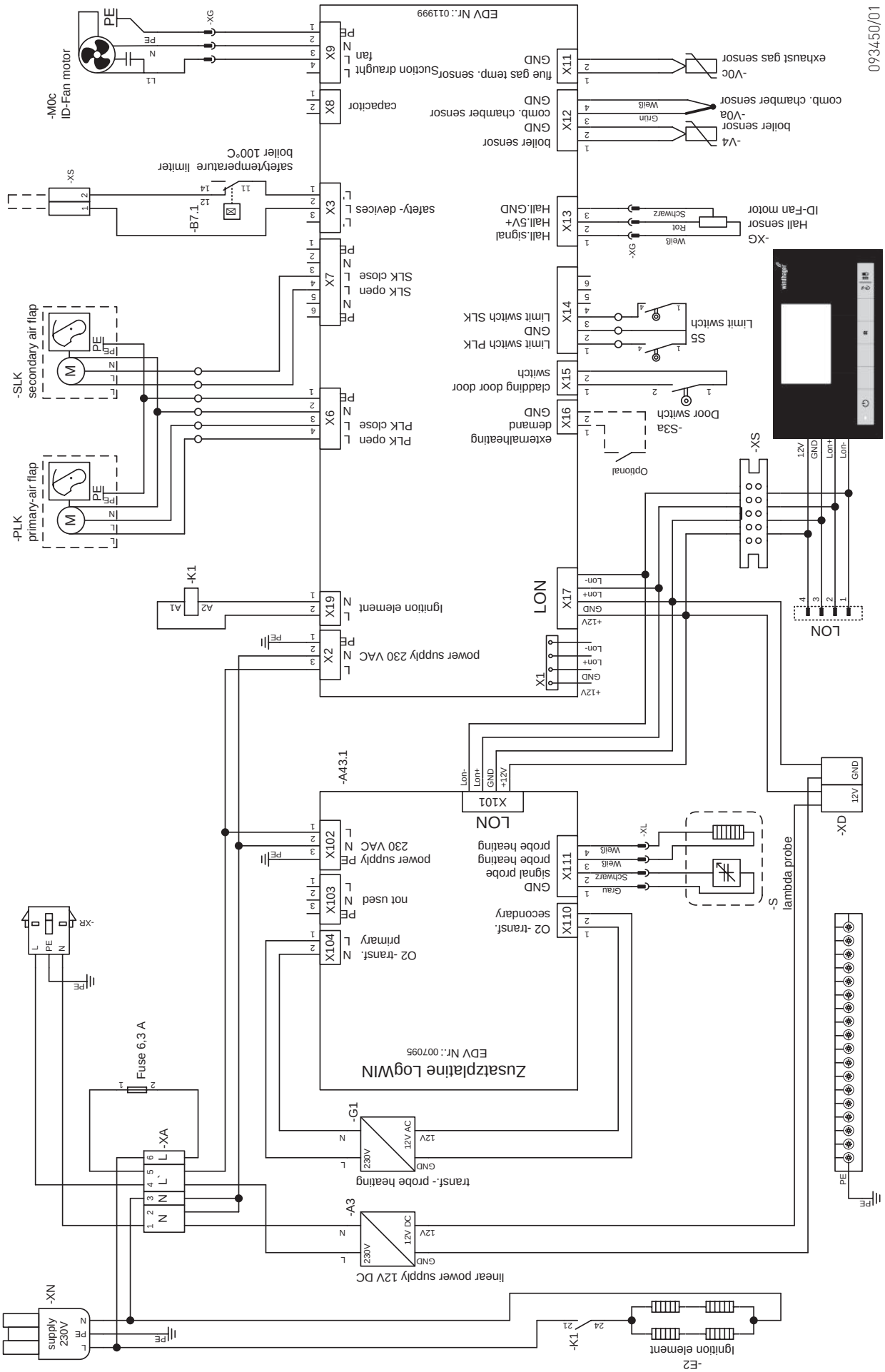


Fig. 98

ELG, Ethernet, Update Software, Update Firmeware

These functions are not yet available.

4.9 LogWIN Klassik basic circuitry



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GUARANTEE AND WARRANTY LIMITATIONS

The guarantee and warranty limitations require that the boiler and related accessories be properly installed and started up by Windhager Customer Service or Customer Service Partner; otherwise the manufacturer's guarantee will not be honoured.

Malfunctions resulting from improper operation or adjustment as well as use of poor or not recommended fuel types are not covered by the guarantee and warranty. Further, the warranty shall be void if equipment other than those provided by Windhage are installed. The special warranty restrictions for your system are available in the "Warranty Conditions" folder supplied with your boiler.

Start-up and regular maintenance following the terms of the "Warranty Conditions" will assure safe, environmentally friendly and economical operation of your system. We recommend that you obtain a maintenance service contract.

Subject to technical modifications. AWP-vor-übersetzt-aus-024150/01

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WOOD

Assembly instructions

LogWIN Klassik

½ m wood gasification boiler
For small and large houses
Nominal thermal output: 18, 25, 30 kW

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07/2014 093391/02

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HEAT WITH VISION

USER MANUAL FOR BATCH FED INDEPENDENT WOOD LOG FIRED BOILERS

SUPPLEMENTARY OPERATING INSTRUCTIONS FOR THE UK MARKET TO BE READ IN CONJUNCTION WITH THOSE IN THE INSTRUCTION BOOKLET

READ THE INSTRUCTION BOOK AND THESE INSTRUCTIONS CAREFULLY BEFORE USING THE BOILER

WARNING NOTE

Properly installed, operated and maintained this stove will not emit fumes into the dwelling. Occasional fumes from de-ashing and re-fuelling may occur. However, persistent fume emission is potentially dangerous and must not be tolerated. If fume emission does persist, then the following immediate action should be taken: -

(a) Open doors and windows to ventilate the room and then leave the premises.

(b) Let the fire go out.

(c) Check for flue or chimney blockage and clean if required

(d) Do not attempt to relight the fire until the cause of the fume emission has been identified and corrected. If necessary seek expert advice.

The most common cause of fume emission is flueway or chimney blockage. For your own safety these must be kept clean at all times.

IMPORTANT NOTES

General

Before lighting the boiler check with the installer that the installation work and commissioning checks described above have been carried out correctly and that the chimney has been swept clean, is sound and free from any obstructions. As part of the boilers' commissioning and handover the installer should have shown you how to operate the boiler correctly.

Do not light the boiler if there is a possibility that any part of the heating system may be frozen

Please make sure the ash-pit door and the hopper lid/charging door are firmly closed at all times whilst the boiler is in operation.

CO Alarm

Your installer should have fitted a CO alarm in the same room as the appliance. If the alarm sounds unexpectedly, follow the instructions given under "Warning Note" above.

Boiler Access

Access to the boiler should be restricted for children, aged and/or infirm persons by way of a lockable door to the room in which the boiler is installed.

Chimney cleaning

The chimney should be swept at least twice a year. It is important that the flue connection and chimney are swept prior to lighting up after a prolonged shutdown period. Where the chimney is believed to have a served an open fire installation it is possible that the higher flue gas temperature from a closed appliance may loosen deposits that were previously firmly adhered, with the consequent risk of flue blockage. It is therefore recommended that the chimney be swept a second time within a month of regular use after installation.

In situations where it is not possible to sweep through the boiler the installer will have provided alternative means, such as a soot door. After sweeping the chimney the boiler flue outlet and the flue pipe connecting the boiler to the chimney must be cleaned with a flue brush.

Periods of Prolonged Non-Use

If the boiler is to be left unused for a prolonged period of time then it should be given a thorough clean to remove ash and unburned fuel residues. Empty the hopper of unburned fuel. To enable a good flow of air through the appliance to reduce condensation and to avoid door seals becoming stuck and subsequently damaged, leave the filling hatch and combustion chamber doors slightly ajar. These actions will reduce the possibility of unnecessary damage and corrosion.

Extractor fan

There must not be an extractor fan fitted in the same room as the boiler as this can cause the boiler to emit smoke and fumes into the room

Aerosol sprays

Do not use an aerosol spray on or near the boiler when it is alight.

Use of operating tools

Always use the operating tools provided when handling parts likely to be hot when the boiler is in use.

Chimney Fires

If the chimney is thoroughly and regularly swept, chimney fires should not occur. However, if a chimney fire does occur turn off the boiler immediately and isolate the mains electricity supply, and tightly close the doors of the boiler. This should cause the chimney fire to go out. If the chimney fire does not go out when the above action is taken then the fire brigade should be called immediately. Do not relight the boiler until the chimney and flue ways have been cleaned and examined by a professional.

Permanent air vent

The boiler requires a permanent and adequate air supply in order for it to operate safely and efficiently.
In accordance with current Building Regulations the installer may have fitted a permanent air supply vent into the room in which the boiler is installed to provide combustion air. This air vent should not under any circumstances be shut off or sealed.

USER OPERATING INSTRUCTIONS

Please read the important notices given above before referring to the main instruction book for detailed operating instructions.

Frequency of cleaning ash and residues from combustion chamber and ash-box

The owner is required to regularly carry out this cleaning operation and the frequency will depend on the heating load. When first put to use the boiler should be checked on a daily basis and experience will show how often this will eventually be required. Remember also that during the main heating season the cleaning interval will shorten as the load on the boiler will be higher.

Recommended fuels

The boiler is designed to burn wood logs only as detailed in the main instruction book. Under no circumstances should you attempt to burn any other type of fuel.

General Maintenance

It is important that any glass or other decorative surfaces are kept clean using the appropriate cleaning materials and techniques as to not damage the internal or external finishes of the boiler.

Spare Parts

For more information on obtaining spare parts, please revert to the specific page of the manufacturer's original instruction manual or contact details provided.

HETAS Ltd Approval

This appliance has obtained HETAS Ltd approval for burning wood logs only as specified in the main instruction manual. Approval does not cover the use of other fuels either alone or mixed with the recommended fuel, nor does it cover instructions for the use of other fuels.

Contact Details

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1. Important initial information for the Technician

The following instructions are available for operation and installation:
Heating expert: Assembly/installation instructions, list of spare parts
System owner: Operating Manual, quick guide, heating instructions

1.1 Safety precautions

The boiler and related accessories are state of the art and meet all applicable safety regulations. Your boiler and all accessories operate using 230 V AC electric current. Improper installation or repair can pose the danger of life-threatening electric shock. Installation may be performed only by appropriately qualified technicians.

Caution symbols

Please take careful note of the following symbols in these Installation instructions.

Attention!

Ignoring the warnings identified can lead to personal injury.

Information!

Ignoring the warnings identified can lead to malfunction of, or damage to the boiler or heating system.

Note!

The blocks of text highlighted provide **information and tips** for operation.

1.2 Flue

A properly dimensioned flue is required for optimal functioning of the combustion system. Measurement of the dimensions must follow EN 13384-1. See the Technical data section for values required for this calculation.

Please note that in the permissible performance range, flue gases may be below 160°C.

The flue gas system must display at least the following classification:

Temperature class:	T400	= nominal operating temperature 400 °C
Soot fire resistance class:	G	= flue gas system with soot fire resistance
Corrosion resistance class:	2	= suitable for unprocessed wood fuels

We would recommend fitting an energy-saving intake regulator for problem-free operation. This will largely prevent moisture in the flue, and losses resulting from down-time will be reduced (draught interruptions). If you have a feed pressure (flue draught) of more than 0.20 mbar, the energy-saving intake regulator must be fitted.

Note!

We would recommend fitting the draught limiter outside the flue around ½ m below where the exhaust pipe intersects with the flue.

Information!

Frequently, overhaul of existing systems involves oversized flue cross-sections or flues not designed for lowtemperature operation. We suggest an evaluation by the local building inspector before installing the boiler system. In this way appropriate modifications can be made to the flue before system installation (see technical data for flue calculation values).

1.3 Boiler room/Installation room

Attention!

The configuration of the entire system must comply with the requirements of regional legislation, applicable regulations, standards and guidelines.

- The minimum clearances for connections, cleaning and maintenance must be complied with – see section 2.3.3 Minimum service clearances.
- Sufficient ventilation of the set-up area must be assured. See section 2.2.9 Combustion air.
- The boiler must be installed in dry premises!
- The boiler may not be installed in rooms that are very dusty or humid.

Permissible limit values: Air humidity: 85 % at room temperature of 25 °C (non-condensing)
Room temperature: +2 to +40 °C

1.4 Initial start-up and operating instructions

Windhager Customer Service or the customer service partner will start up the boiler first of all, and will familiarise the customer with the system operation and cleaning of the boiler, with reference to the Operating Manual.

The following preconditions must be met before you order the initial start-up:

1.) Boiler installed correctly.
2.) System fully wired up electrically.
3.) System rinsed, filled and vented – heat consumption must be possible.
4.) Boiler connected to domestic water and filled.
5.) Sufficient quantity of fuel available (pellets, oil, gas, slit logs).
6.) The customer must be present during start-up.

The initial start-up cannot be carried out if any of these points are neglected. The customer will be charged for any unnecessary costs arising as a result.

Start-up and maintenance by Windhager Customer Service or a customer service partner are part of the guarantee requirements of the enclosed "guarantee limitations".

Note!

When the boiler is heated up for the first time, bad smells may result from gas emissions from insulation or paint residue being burnt off. Ensure that the boiler room/installation room is therefore well vented. Condensation may also form near the coasting surfaces and the combustion chamber temperature may only increase after a delay.

2. For the Installer

2.1 Delivery, packaging

Boiler covered with a plastic sack.
The cladding, control panel and small parts can be found in the 2 cardboard boxes and in the filler chamber.

Fig. 2 LogWIN Klassik

Fig. 3 Cladding and control panel in 2 cardboard boxes.

2.2 System

2.2.1 Area of use

For heating buildings acc. to EN 12831.
The boilers are designed and approved as heat generators for hot water heating systems with a permissible flow temperatures of up to 90°C. They may be installed only in sealed systems. The max. boiler temperature for the LogWIN is limited in the factory to 80 °C.

The resulting flow temperature depends on the relevant operating status and the line losses to the system.

2.2.2 Standards

The following European standard should be followed: EN 12828, this specifies that the following should be fitted:

a) A closed expansion tank.

b) A reliably functioning safety valve (with max. 3 bar reaction pressure) installed at the highest point of the boiler or at a non-closable line.

c) A thermometer, a pressure gauge.

d) An automatic device for dissipating heat which will prevent the maximum water temperature in the boiler of 110°C from being exceeded. The built-in thermal safety device (heat exchanger) should always be used with the thermal discharge safeguard.

e) A low-water cut-off: A low-water cut-off is not required for systems providing up to 300 kW nominal thermal output, if it can be ensured that a lack of water in the system will not result in excess heating.

   If the boiler is above the radiators, then a low-water cut-off must be installed.

2.2.3 Accumulator tank

The installation of a buffer tank is required by the following standards / laws:

- EN 303-5
- 1st Federal Immission Control Ordinance (Germany)
- Art. 15a of the Small Combustion Devices Agreement (Austria)
- Air Protection Ordinance (Switzerland)

Having a correctly sized accumulator tank is essential for correct operation of a wood-fired heating system. The fuel must always be selected and the heat load of the building calculated. Heating characteristics (e.g. bringing the hot water tank up to temperature in summer) and the system configuration (ground and/or radiator heating circuits) should also be taken into consideration.

Information!

Rooms that are not heated at times (guest rooms, living areas only used at weekends, etc.) must be subtracted from the calculated heat load (QH) for the accumulator tank configuration!

Recommended accumulator tank content

Wood gasification	Boiler model	Recommended accumulator tank content:
LogWIN Klassik	LWK 180 – 300	2000 l

Note!

Refer to planning documents for how to calculate the minimum buffer tank volume.

2.2.4 Heating circuits

Several heating circuits:

In-line regulating valves should be installed to permit better regulation of the system. In a building without insulation (new building, not yet plastered) the calculated and actually required heating requirements often differ to a considerable extent.

Minimum heat consumption:

The smallest possible boiler power must be continuously dissipated from the boiler during operation. Suitable measures to ensure minimum heat consumption should be maintained throughout the entire burning time, e.g.:

- Correctly dimensioned buffer tank - see 2.2.3.
- Function of the MES plus–controller in the WVF+ function module on the master user module incl. no thermostatic valves
- Non-blockable heating circuit, e.g. never fully close manual mixing valve, incl. no thermostatic valves

Note!

If operating with a manual mixing valve or the MES plus–function, elevated room temperatures may sporadically occur.

Mixer valve:

A 3-way mixer valve is always necessary; in conjunction with outside temperature control, there must be a 3-way motorised mixing valve and a buffer tank.

Underfloor heating:

Only possible with a buffer tank (with outside temperature control, motorised mixing valve).

Return flow temperature increase:

Required with LogWIN Klassik. It is essential that a return temperature of 61 °C be maintained during heating.

In order to achieve good temperature stratification in the heat accumulator or buffer tank, we recommend that the boiler circuit be regulated. When using the return hold-up group SK RH 61 in connection with the stratified charge function (MESplus function module WVF+), regulating the boiler circuit is no longer necessary.

Boiler start-up relief:

A boiler start-up relief must be installed and connected in all cases so that the circulation pump(s) are switched off when the boiler temperature is below 60 °C. This prevents condensation forming in the boiler and extends its service life. A boiler start-up relief of this kind is contained in the MESplus control system.

2.2.5 Circulation pump

Since 2013, regulations in Europe require that new circulation pumps satisfy a minimum level of energy efficiency. The Energy Efficiency Index (EEI) must be observed.

2.2.6 Heating water

Attention!
The chemical composition of the heating water must comply with the requirements of regional legislation, regulations, guidelines and standards, e.g. ÖNORM H 5195, VDI 2035, SWKI BT 102-01.

Applicable for Austria (excerpt from ÖNORM H 5195):

a) According to ÖNORM H 5195 (2010 edition), the condition of the heating water must be checked every 2 years by a heating technician in order to avoid corrosion and sediment accumulation in the heating system.

b) The pipe lines and heating appliances should be thoroughly rinsed before the boiler is connected.

c) To protect the boiler from contamination from the heating system, installation of a dirt trap is required in old or existing systems with maintenance cocks installed in the return line.

d) If oxygen diffusion or sludge build-up cannot be prevented, the system must be segregated by means of a heat exchanger.

e) If antifreeze is used, a minimum volume of 25 % antifreeze is required, otherwise corrosion prevention is not guaranteed.

2.2.7 Domestic water (bringing the hot water tank up to temperature in summer)

There may still be fuel in the boiler after the hot water tank has been brought up to temperature. As a result, measures must be taken to dissipate the surplus energy – see 2.2.4 Heating circuits; Minimum heat consumption.

2.2.8 Combination with automatic boiler (e.g. pellet or oil-fired boiler)

If the LogWIN and an automatic boiler (e.g. pellet or oil-fired boiler) are connected to one flue **without a MESplus** control, in the case of LogWIN a flue gas thermostat (accessory OK-050) must be installed to prevent parallel operation on the same flue.

2.2.9 Water-side resistance (pressure loss)

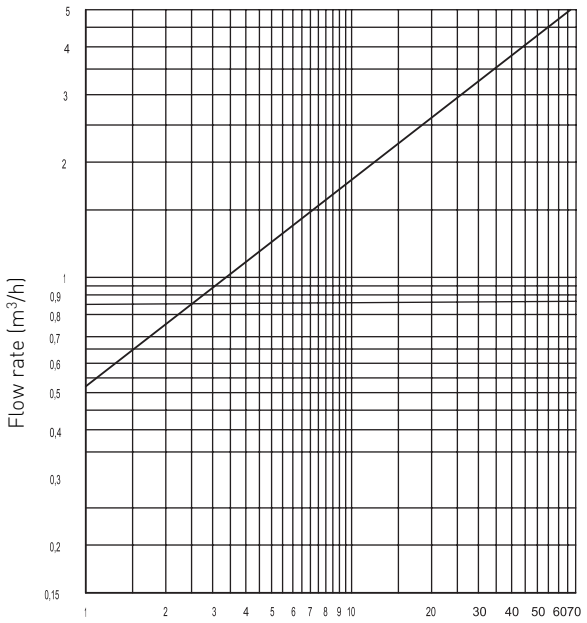


Diagram 1 water-side resistance

2.2.10 Combustion air

The combustion air is drawn directly by the device from the installation room, therefore the installation room has to be adequately ventilated. The combustion air should be directed to the vicinity of the boiler and must be free from pollutants (gases, vapours and dusts), otherwise malfunctions and increased wear (e.g. corrosion) may occur.

Attention!

The configuration of the entire system must comply with the requirements of regional legislation, applicable regulations, standards and guidelines.

Applicable for Austria (excerpt from ÖNORM H 5170):

The area of the free minimum cross-section must be 5 cm² per kW of the boiler's nominal total output[1].

The opening to the outdoors for combustion air should be designed as follows:
- the flow of air must not be restricted in any way by the weather (e.g. snow, leaves),
- the free cross-section area remains the same when taking the cover grille, discs etc. into consideration.

Applicable for Germany (excerpt from the Firing Ordinance, September 2007):

For hearths with a nominal output of not more than 50 kW in total that are dependent on surrounding air, supply of combustion air will be sufficient providing that every installation rooms has an opening that vents to the atmosphere with an unobstructed cross-section of at least 150 cm² or two openings of 75 cm² each, or pipes leading outside with a technically equivalent cross-section.

Information!

Malfunctions or complaints occasioned by inadequate combustion air will not be covered by the guarantee!

[1] The boiler's nominal total output is the sum of the nominal outputs of all heat generators installed in the same boiler / installation room.

2.4 Installation sequence

2.3.1 Parts designations for installation

Information!

All cladding parts must be fitted in full for air guidance and the dissipation of heat on the boiler.

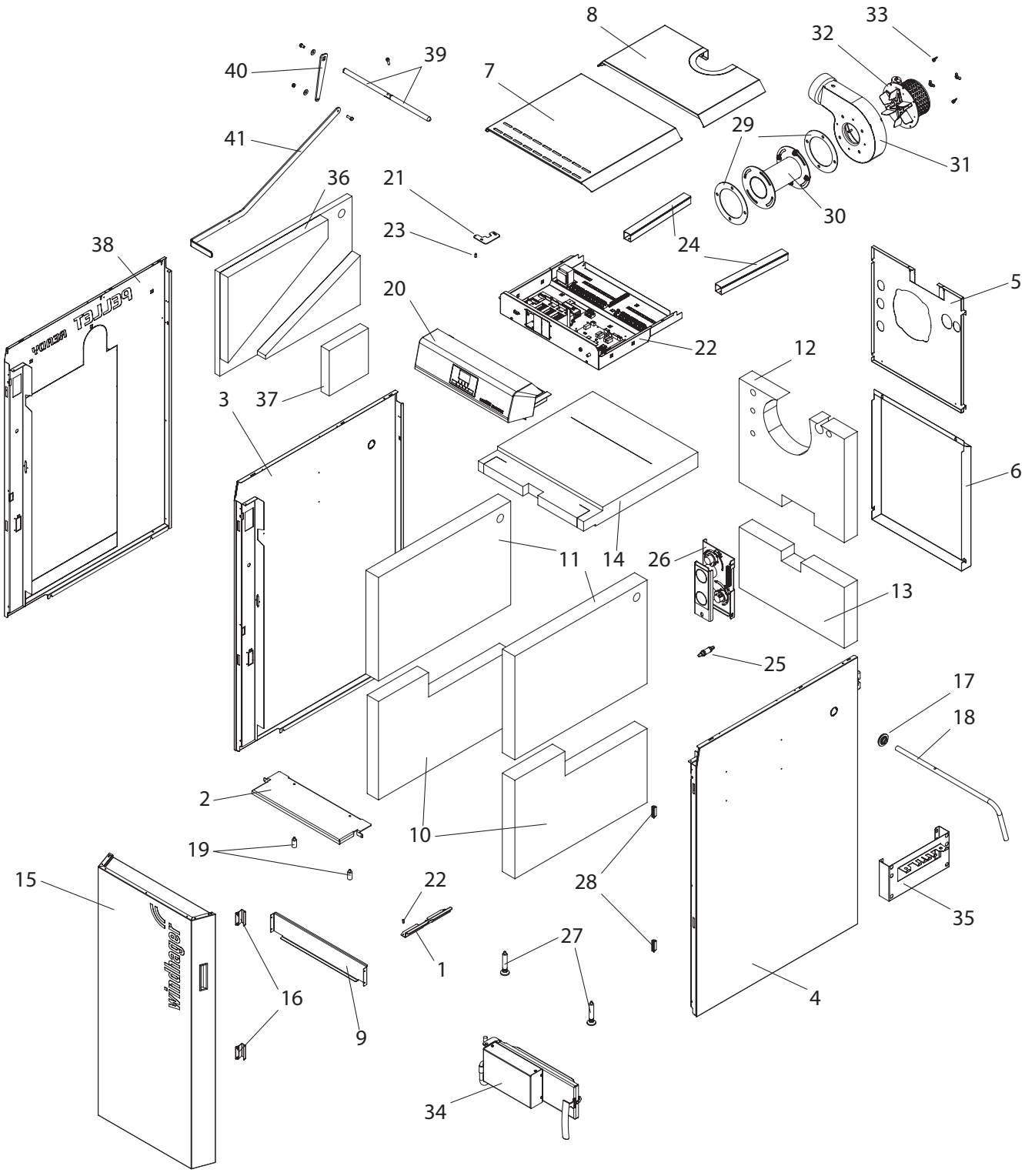


Fig. 4 Parts for installation

1.....Lower door hinge
2.....Carburisation gas duct
3.....Side panel left
4.....Side panel right
5.....Rear wall top
6.....Rear wall bottom
7.....Front boiler cover
8.....Rear boiler cover
9.....Hook-in plate ash pan
10.....Bottom insulation, left/right
11.....Top insulation, left/right
12.....Top rear insulation
13.....Bottom rear insulation
14.....Top front insulation
15.....Cladding door
16.....Magnet retainer (2 pcs.)
17.....Grommet
18.....Lever for cleaning heating surfaces
19.....Carburisation gas duct attachment (2 pcs.)
20.....Control panel
21.....Upper door hinge
22.....Control panel
23.....Dog point screw (2 pcs.)
24.....Cable channel (2 pcs.)
25.....Lambda sensor
26.....Air control
27.....Set screws front (2 pcs.)
28.....Magnetic catch (2 pcs.)
29.....Blower seal
30.....Flue connection adapter – accessories
31.....Blower housing
32.....Flue gas blower
33.....Wing nugs
34.....Lighting door with automatic ignition – accessory
35.....Hanger – accessory

only LogWIN pellet ready:

36.....Top insulation left
37.....Top insulation
38.....Side panel left
39.....Shaft for cleaning heating surfaces
40.....Shorter lever
41.....Lever for cleaning heating surfaces

2.3.2 Taking into the building and installing

The appliance must be taken into the building and installed without subjecting it to significant knocks and jolts, in order to avoid damaging the combustion chamber and/or the parts slipping. The warranty will be invalidated if the appliance is damaged due to having been taken into the building and installed incorrectly or if the appliance malfunctions as a consequence of this.

The LogWIN may only be transported upright and without cladding and it is easiest to transport using a lift truck or by rolling on pipes. When transporting via stairs and the such like, the boiler must be suitably secured. Also refer to the technical data in section 4.5 for transport dimensions.

Note!

There is a crane lug on the top of the boiler for transport using hoisting winches. The weight can be reduced by approx. 120 kg by removing parts which are easy to disassemble (e.g. doors, hook-in plates, burnthrough plates, heating surface cleaning etc.).

The boiler can be installed directly on a non-flammable surface and does not require special foundations.

2.3.3 Minimum clearances for fire protection, cleaning and maintenance

The following minimum clearances from flammable materials and for connections, cleaning and maintenance must be complied with.

Attention!

Follow the installation guidelines for boiler rooms! The configuration of the exhaust line must comply with technical fire protection requirements in accordance with the applicable regulations, standards and guidelines.

Minimum clearances between exhaust pipe (piece connecting to flue) and combustible components	
400[1] mm	for an uninsulated exhaust pipe
100[1] mm	for an insulated exhaust pipe (min. 2 cm insulation thickness)
50[2] mm	for tested, double-walled exhaust system

[1] DIN V 18 160-1
[2] in accordance with approval/identification of exhaust system

LogWIN Klassik:

All dimensions in mm:
Minimum room heights: 1850 mm

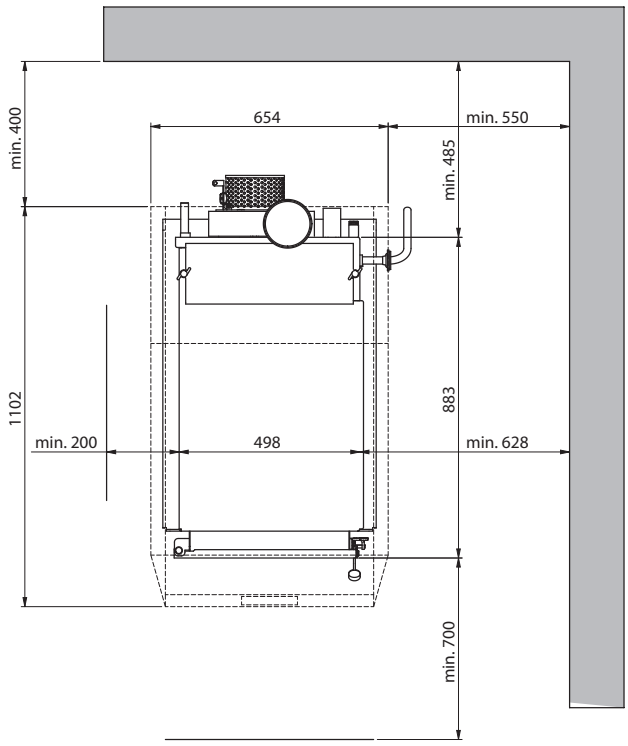


Fig. 5 LogWIN Klassik exhaust pipe upwards – top view

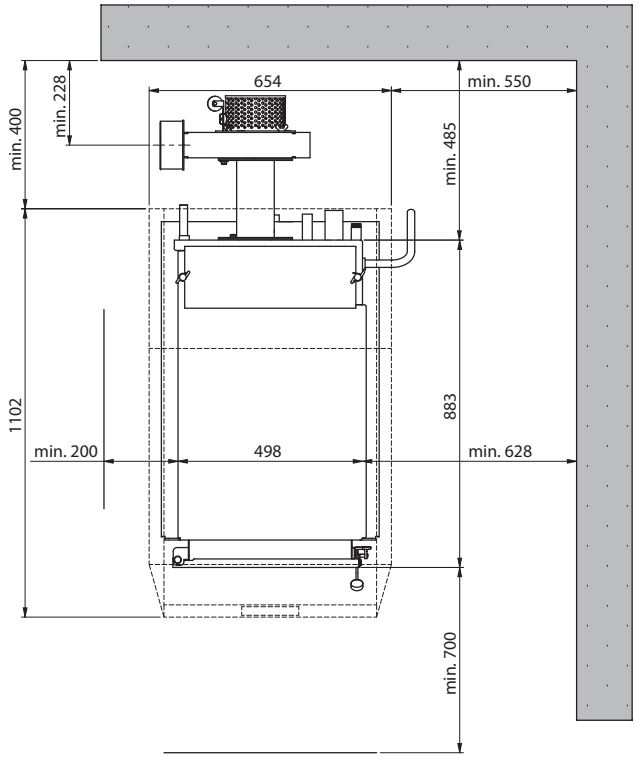
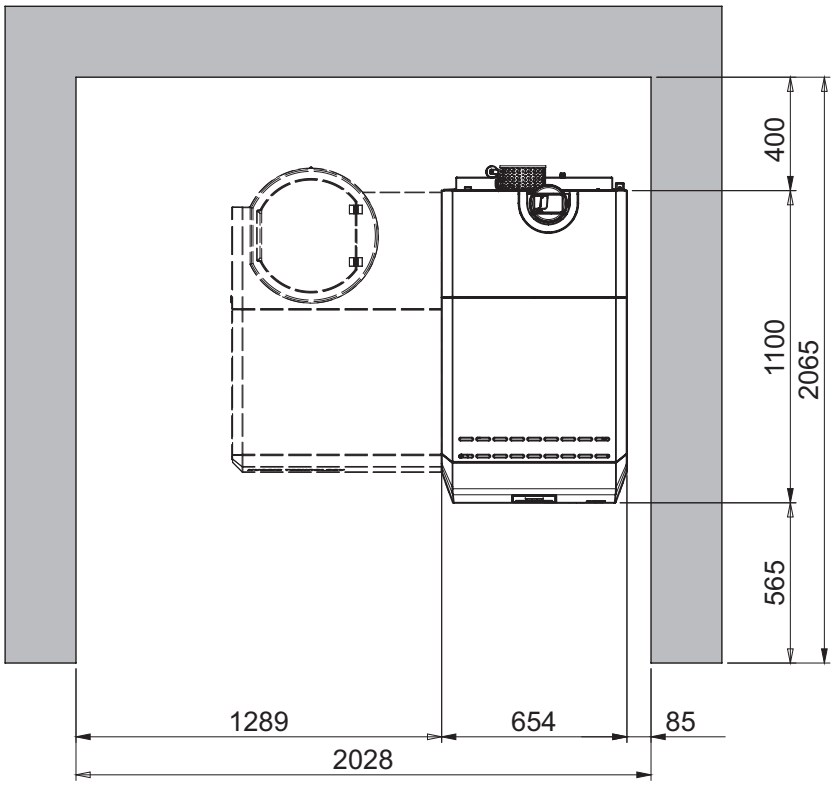


Fig. 6 LogWIN Klassik with exhaust pipe adapter– top view

LogWIN Klassik pellet ready:

for subsequent extension with a pellet boiler to the DuoWIN.



All dimensions in mm:

Fig. 7 LogWIN Klassik pellet ready – top view

2.3.4 Prior to installation

Move the boiler to its definitive installation position and use the set screws to align it inclined slightly upwards towards the rear. If it is not possible to level the unit using only the rear set screws, two additional set screws can be installed at the front – Fig. 9.

The cladding door and the boiler doors are designed for door catches on either the left or right. Standard delivery always includes door catches on the left. The catches on the cladding door and boiler doors must be on the same side.
Prior to installing the set screws, the lower door hinge and the dog point screw for attaching the cladding door must be mounted either on the left or right, depending on which side the door catches are to be located. – Fig. 8.

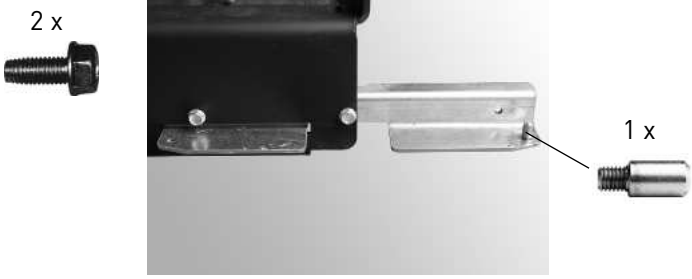


Fig. 8 Install door hinge for cladding door left or right

Fig. 9 Install two set screws in the front

2.3.5 Installing the flue connection adapter

– Only for LogWIN with flue connection adapter (accessories)

  Standard installation of the blower housing is directly on the boiler – Fig. 10 ➔ flue connection at top.

  With the adapter (accessories), the blower housing is located outside the cladding – Fig. 13. The flue connection is steplessly adjustable from left to right – Fig. 12.

– Unscrew 4 interior nuts in the blower housing (Fig. 10) and remove the housing. Do not remove the seal – Fig. 11.

Fig. 10 Glower housing directly on boiler – standard

Fig. 11 Seal on boiler

– Secure adapter, with slot position depending on desired angle of flue connection, on boiler according to Fig. 12 with seal and 4 M8 nuts – Fig. 12, 13.

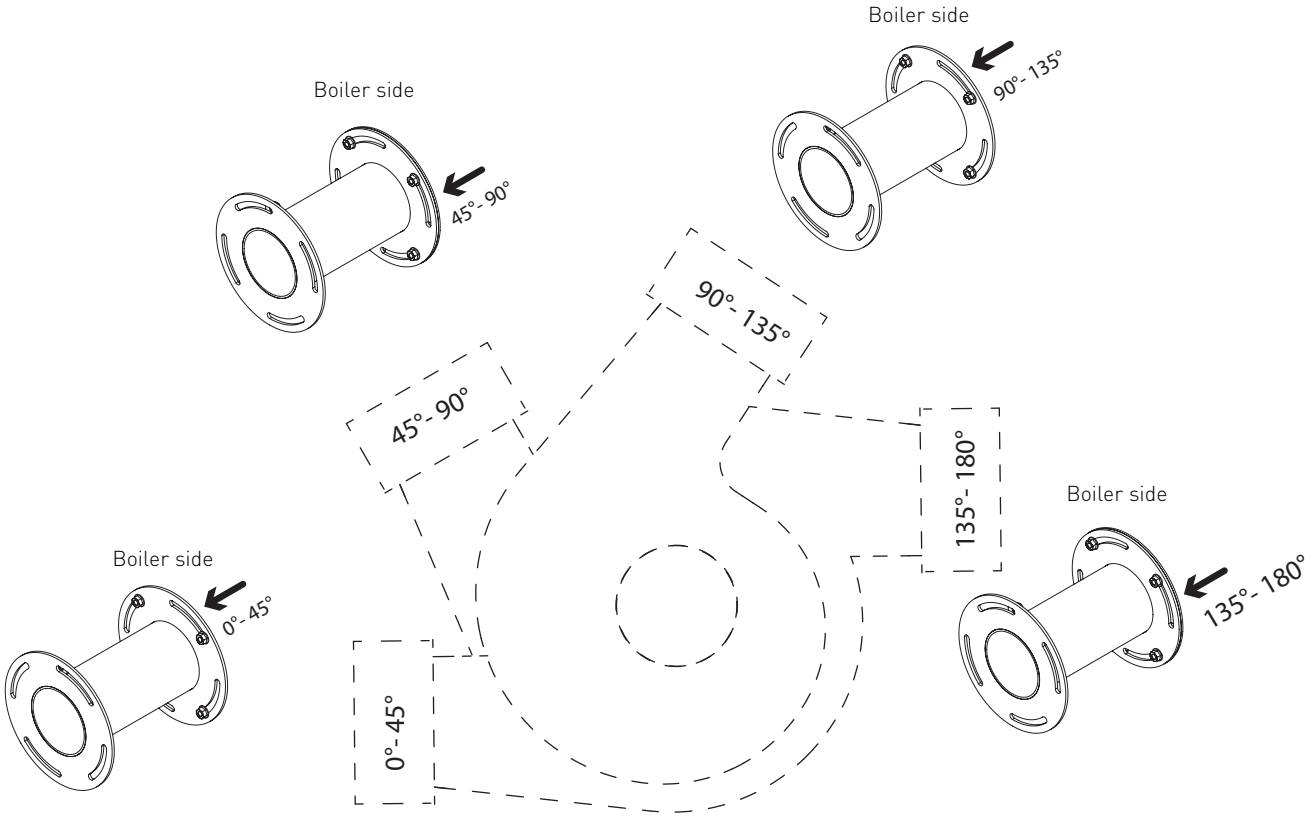


Fig. 12 Installation of adapter depending on angle of flue connection

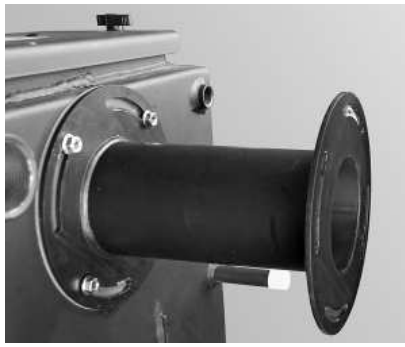


Fig. 13 Adapter on the boilder (accessories)

Note!

Do not screw the blower housing onto the adapter until the rear panel has been installed – otherwise the rear panel cannot be installed.

2.3.6 Installing the flue gas blower, air control and lambda sensor

- Screw the flue gas blower to the blower housing with 4 wing nuts – Fig. 16.
- Hook in the air control at the top and secure with screw at the bottom – Fig. 14, 16.
- Screw the lambda sensor in finger tight and tighten approx. 1/4 turn with an open-ended wrench (SW 22) – Fig. 15, 16.

Fig. 14 Hooking in air control at top and screwing on at bottom

Fig. 15 Lambda sensor installed

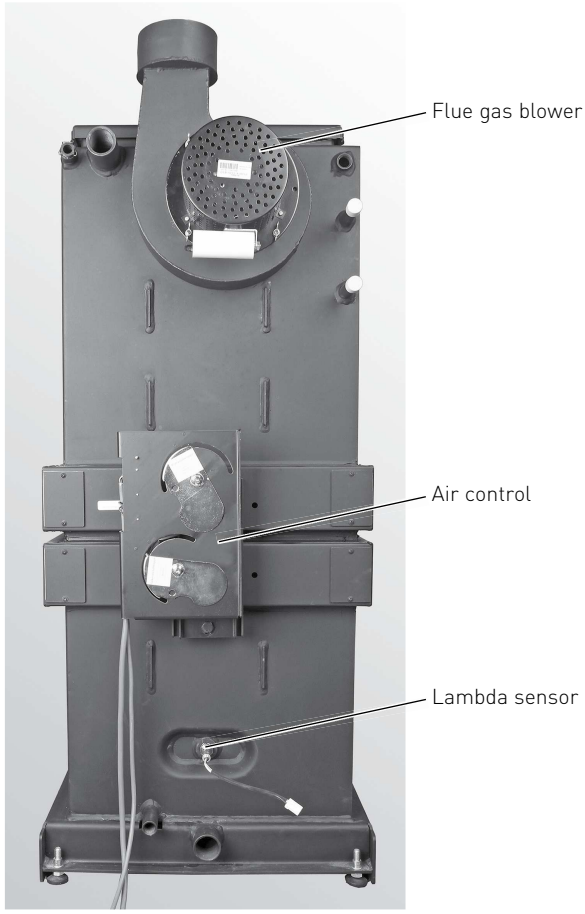


Fig. 16 Flue gas blower, air control and lambda sensor installed

2.3.7 Installing the lighting door with automatic ignition

- Only for LogWIN with automatic ignition (accessories) see separate installation instructions (included).

Fig. 17 Automatic ignition

Fig. 18 Lighting door with automatic ignition

2.3.8 Installing the carburisation gas duct

– Screw in 2 fasteners for the carburisation gas duct over the heating door on the boiler, see Fig. 19, 20.
– Attach the carburisation gas duct and screw tight with 2 M8 nuts – Fig. 21.

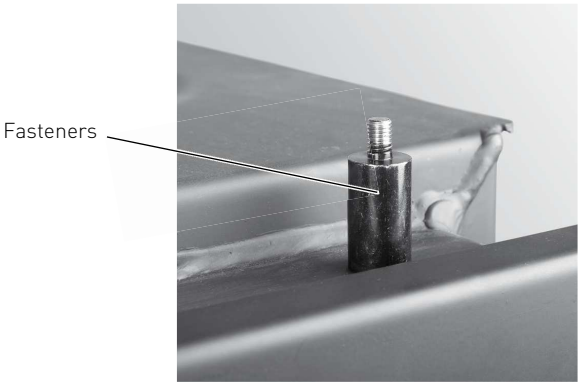


Fig. 19 Installing 2 fasteners for carburisation gas duct

Fig. 20 2 fasteners installed

2 x

Fig. 21 Installing the carburisation gas duct

2.3.9 Mount shaft for the lever for heating-surface cleaning
(for LogWIN Klassik pellet ready only)

Note!

With the LogWIN Klassik pellet ready, the heating-surface cleaning lever can only be mounted to the left-hand side of the boiler.

– Connect both shaft components (Fig. 22) and push the pointed side of the shaft into the rod axle – Fig. 23.
– Screw the shorter level to the shaft with a hexagon screw M8x16 and a U-washer 8 – Fig. 24.

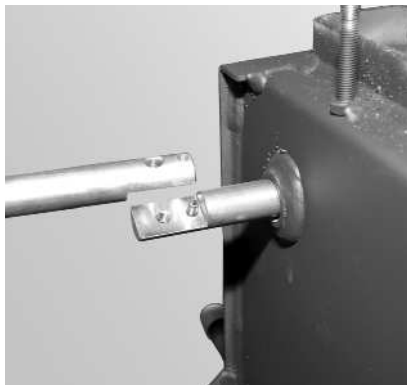


Fig. 22 Connect both parts of the shaft

Fig. 23 Push the shaft into the rod axle

1 x

Fig. 24 Screw the shorter lever into position

2.3.10 Installing the insulation

only for LogWIN Klassik pellet ready:

– Remove cut-out for heating-surface cleaning lever – Fig. 25.

– Attach insulation on top and sides, see Fig. 26 – 29.

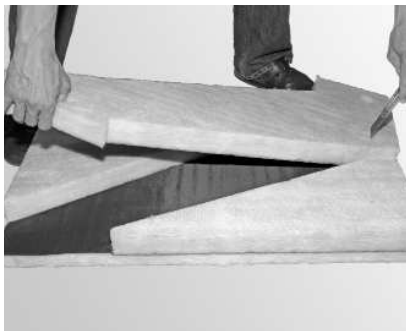


Fig. 25 Remove cut-out, for LogWIN Klassik pellet ready only

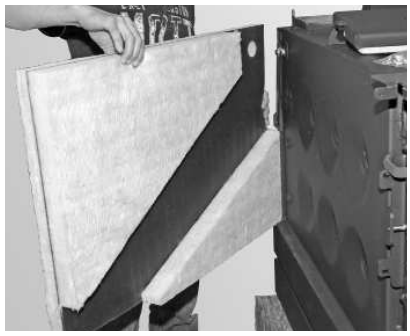


Fig. 26 Installing insulation (LogWIN Klassik pellet ready)

LogWIN Klassik pellet ready:

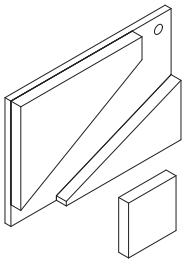


Fig. 27 Installing insulation (LogWIN Klassik pellet ready)

LogWIN Klassik:

Fig. 28 Installing insulation (LogWIN Klassik)

Fig. 29 Installing insulation

2.3.11 Installing the side panels

– Screw in 2 screws on the bottom of each side of the base **halfway** – Fig. 30. Release the side panels and hook them into the installed screws at the bottom (Fig. 31, 32) and loosely screw the top on with one self-tapping screw and one saw tooth ring for earthing – Fig. 33.

Note!

Only screw the cladding screws on loosely at first; do not adjust the cladding (gap size) and tighten all screws until all cladding parts have been installed.

2 each of

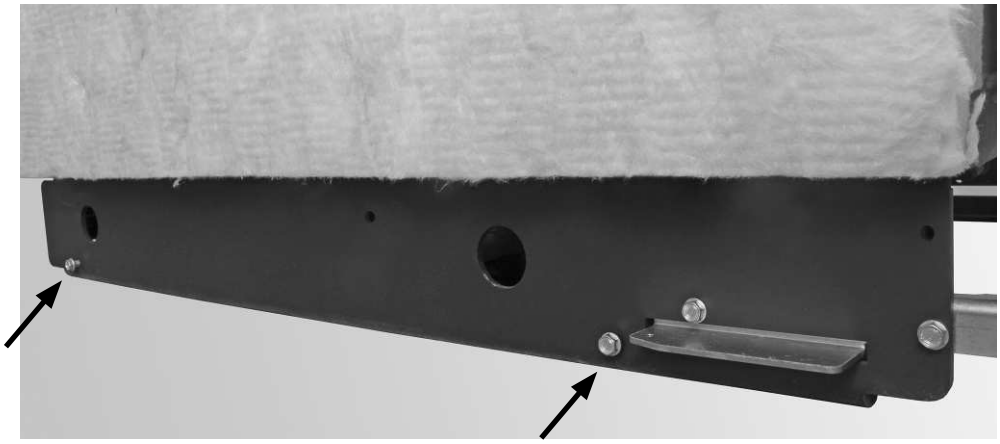


Fig. 30 Screw in 2 screws on each side of the base

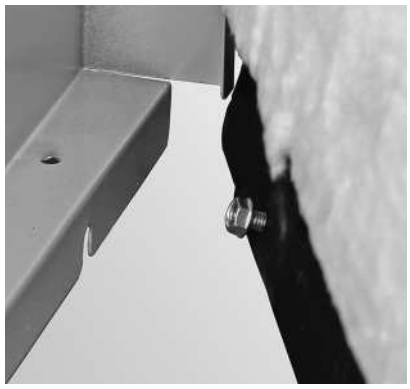
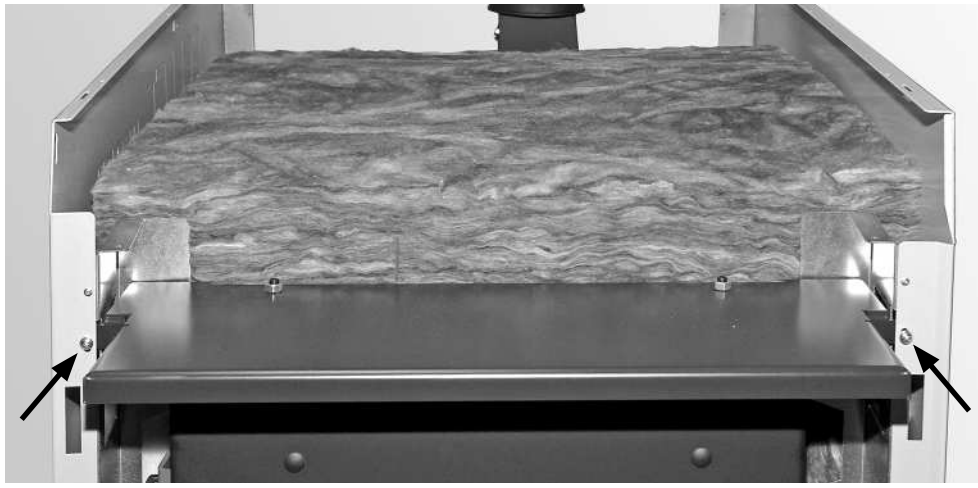


Fig. 31 Hooking the side panels in with screws at the bottom

Fig. 32 Hooking in side panels

1 x



1 x

Fig. 33 Screws the side panels on loosely at the top front.

2.3.12 Installing the control panel

– Place the control panel on the side panels and attach it to each with 2 self-tapping screws and 1 saw tooth ring for earthing – Fig. 34.

– Attach the cable channels at left and right (feed-through at rear) with a drilling screw on each side to the front of the control panel; leave some overhang over the cladding at the rear (approx. 5 mm) – Fig. 34. Cable routing, see Fig. 40 and Item 3.

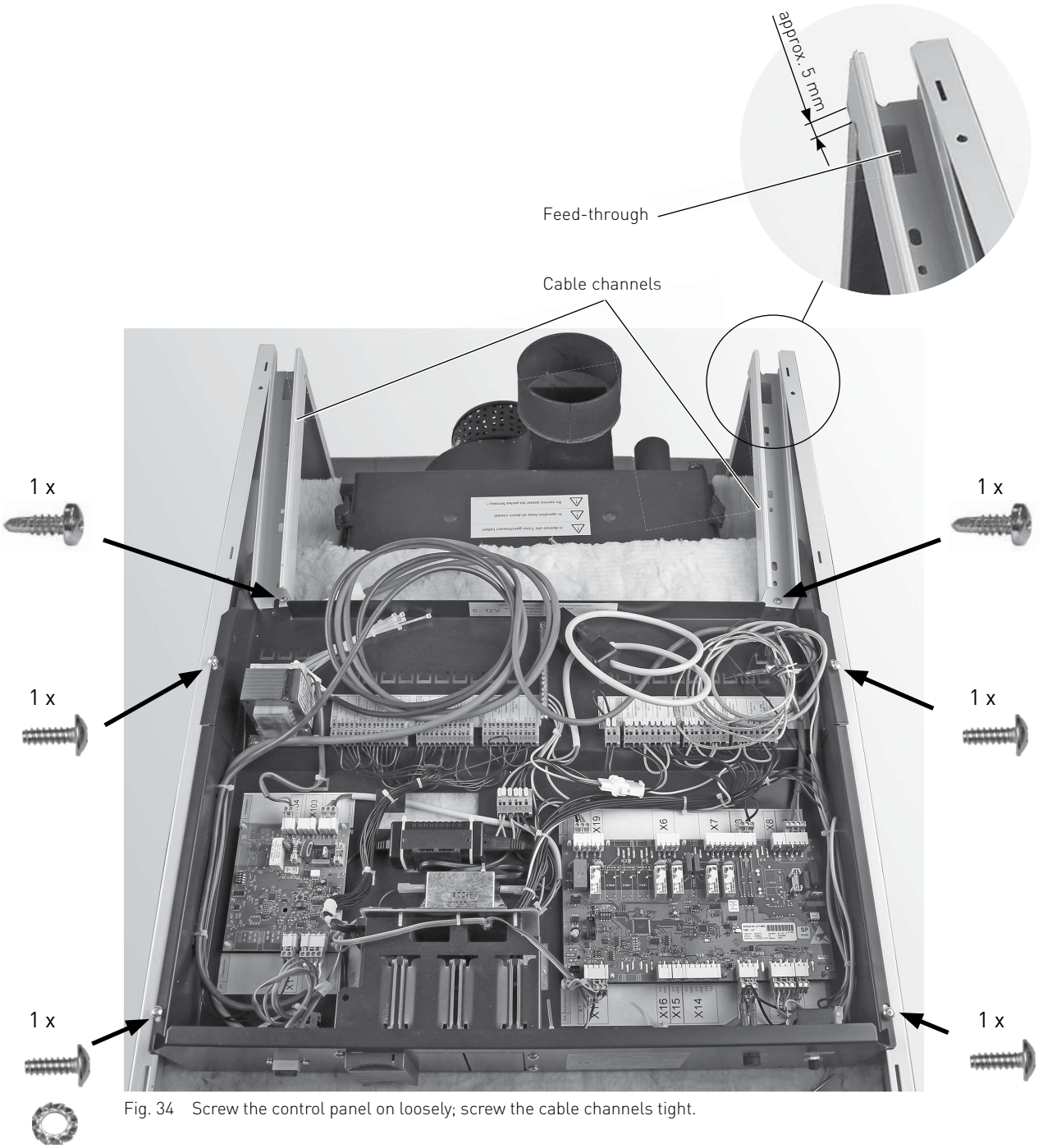


Fig. 34 Screw the control panel on loosely; screw the cable channels tight.

2.3.13 Installing the thermocontrol sensor

– Route the thermocontrol sensor (green cable) at the front of the right side panel down and feed through – Fig. 35, 36. But first bend the cut-out (feed-through) at the bottom of the side panel out of the way.

– Insert the sensor over the ash door in the front and into the protective tube; hook the spring in place – Fig. 37, 38.

Information!

Pull the protruding cable from the thermocontrol sensor back into the side panel or control panel. The cable may not hang out in order to keep it from becoming caught in the ash door.

– Secure the thermocontrol sensor cable to the side panel with a cable tie – Fig. 38.

Fig. 35 Inserting the thermocontrol sensor at the top

Fig. 36 Threading through thermocontrol sensor

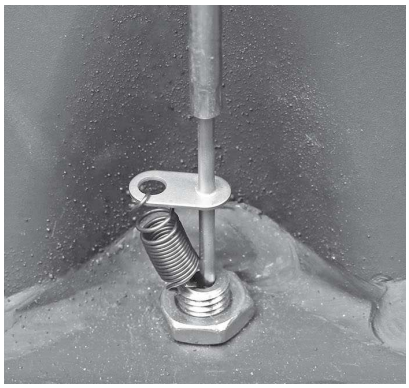


Fig. 37 Securing the thermocontrol sensor with spring

Fig. 38 Pull back the cable and secure it with cable ties

2.3.14 Installing the thermocontrol sensor cover

– Attach the thermocontrol sensor with 4 self-tapping screws – Fig. 39.

2 each of
In Betrieb alle Türen geschlossen halten!
In operation keep all doors closed!
En service laisser les portes fermées !
2 each of

Fig. 39 Attaching the cover over the thermocontrol sensor with 4 screws

2.3.15 Installing the mains connection and sensor

– Route the mains cable and sensor lines in the right cable channel toward the back – Fig. 40. Plug the flue gas sensor (accessories) in the control panel to Plug X11 and also route it in the right cable channel toward the back. Route all sensor lines through the feed-through in the cable channel downward.

– Screw the power socket to the rear of the side panel with two 2.9x16 self-tapping screws – Fig. 41.

Insert boiler sensor and safety temperature limiter sensor (STB) as far as possible into the immersion sleeve and secure them with the sensor guard to prevent them from slipping out – Fig. 41.

– Install the flue gas sensor with protective tube (accessories) into the flue outlet as described in the installation instructions – Fig. 41.

– Route both cables for the flue gas blower in the cable channel stoward the back – Fig. 41.

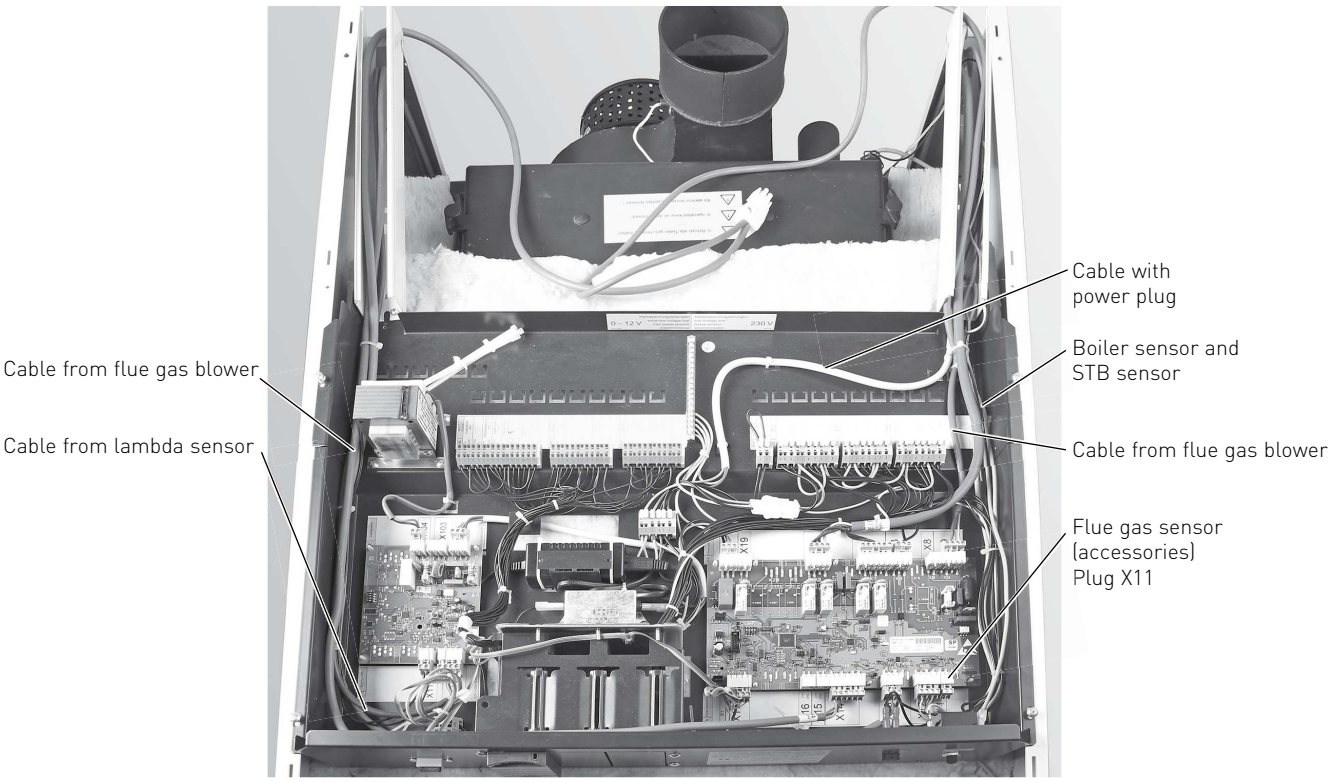


Fig. 40 Control panel, cable routing

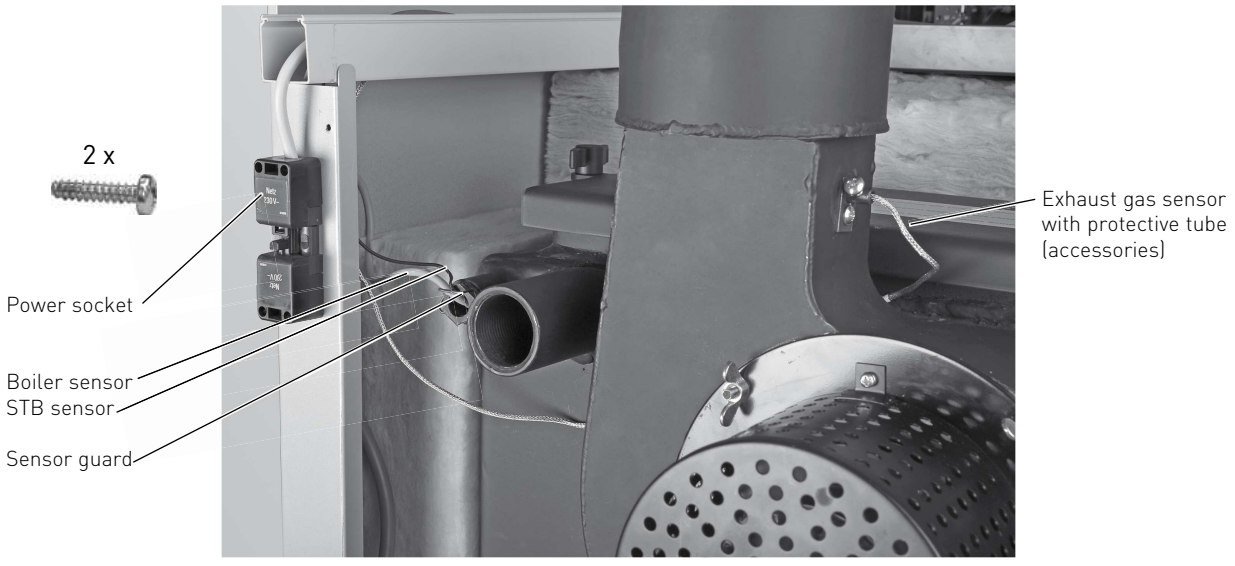


Fig. 41 LogWIN Klassik – rear side

– Route both cables from the air control in the side panels upward via the cable channel feed-through into the control panel as shown in Fig. 42 and connect as shown in Fig. 43.
– Route the lambda sensor cable from the control panel via the cable channel feed-through in the side panel downward and connect to the lambda sensor – Fig. 42.

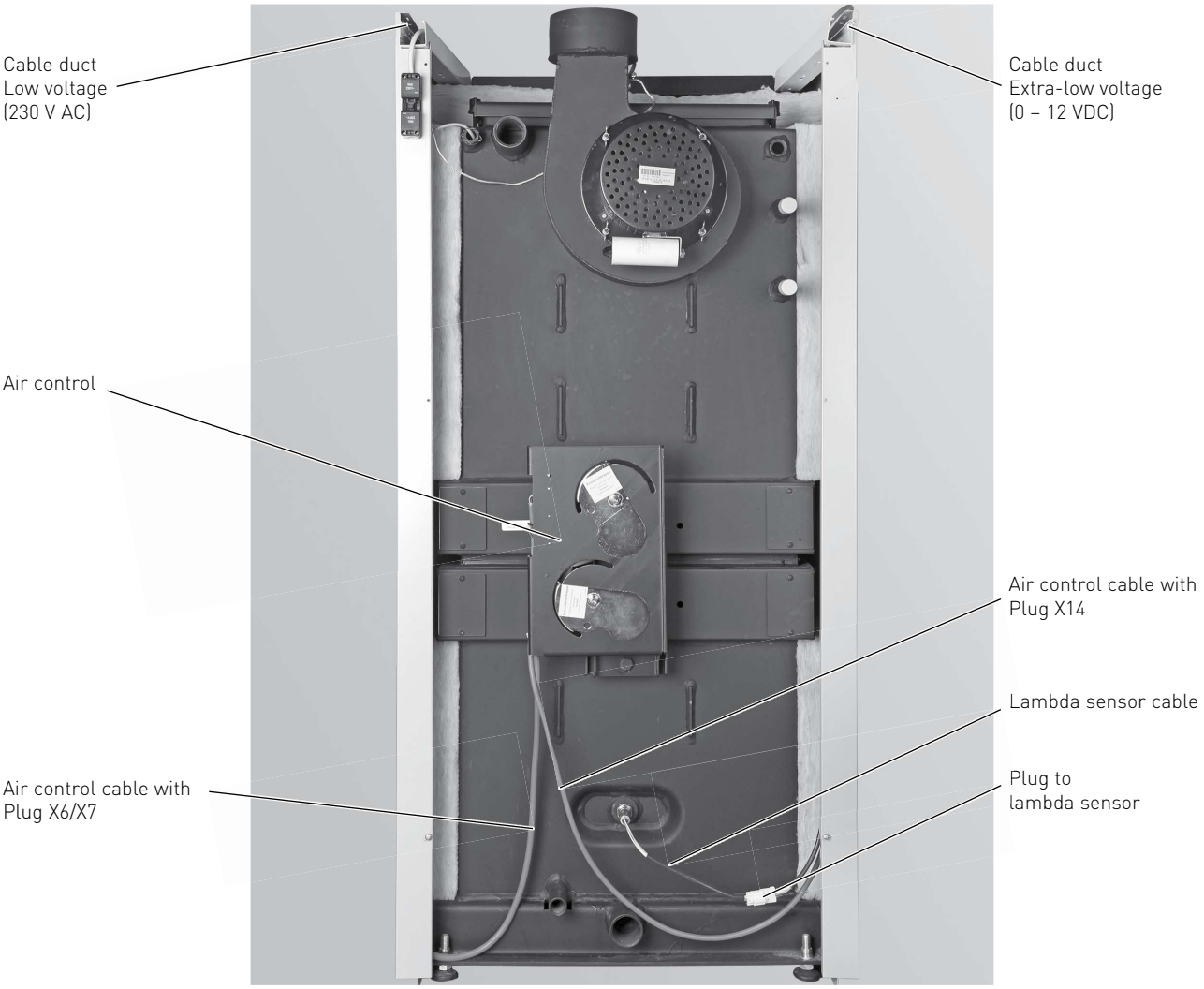


Fig. 42 LogWIN Klassik with rear panels removed – rear view

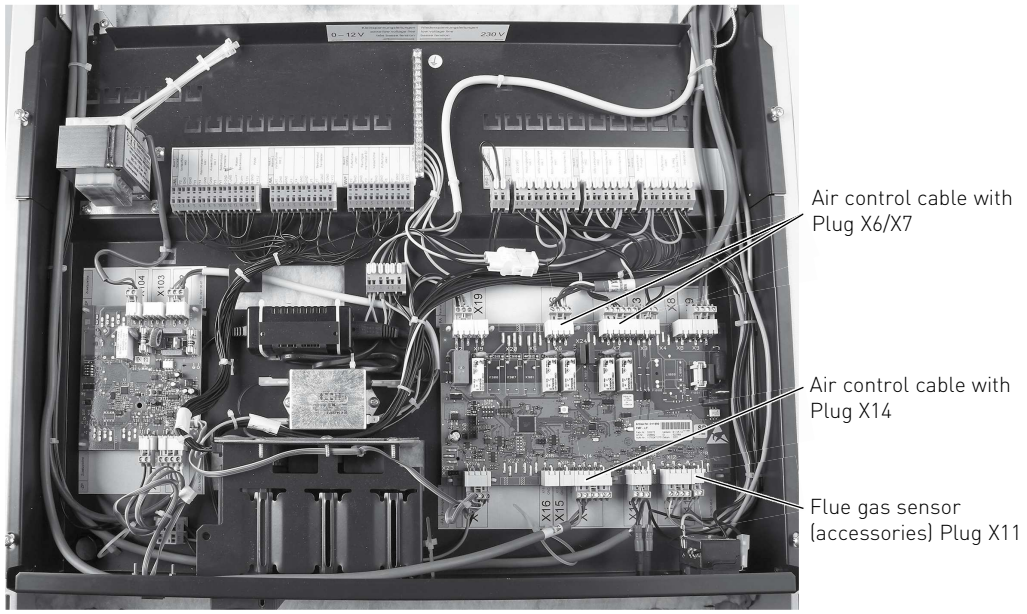


Fig. 43 LogWIN Klassik control panel – top view

2.3.16 Installing insulation for the rear panel

– Install insulation on top and bottom as shown in Fig.44.

Fig. 44 Installing insulation on the rear panel

2.3.17 Installing the rear panels

– If no adapter for the flue gas blower (accessories) is being used, break off the cut-out at the top of the back panel – Fig. 45.
large cut-out = exhaust pipe insulated
small cut-out = exhaust pipe not insulated
do not break off = adapter for flue connection installed

– Fasten the rear panel at top and bottom with 4 screws each – Fig. 46.

– Connect the blower plug to the flue gas blower and secure cable at side with cable ties – Fig. 46.

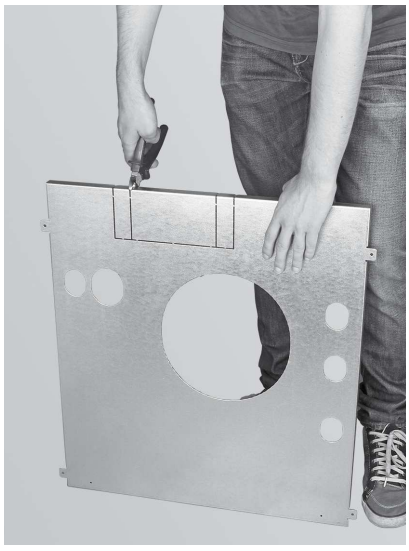


Fig. 45 If no adapter for the flue connection is being used, break off the cut-out

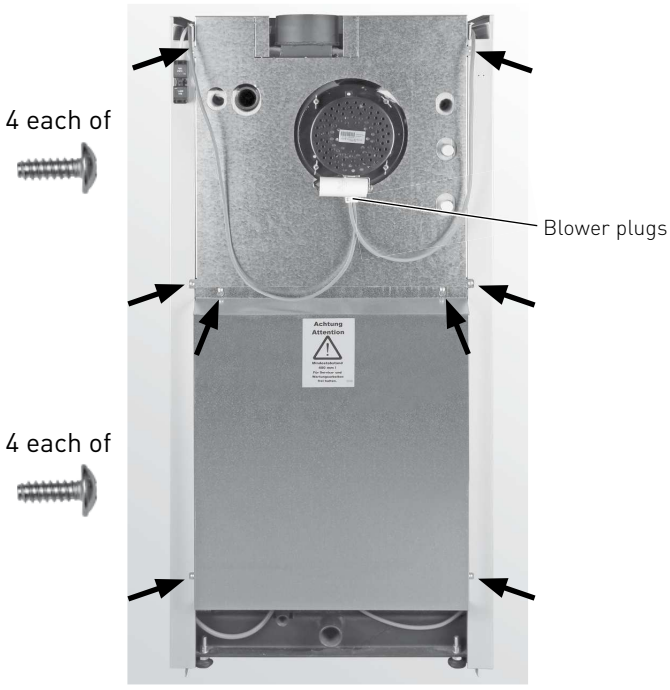


Fig. 46 Fitting the rear panels

2.3.18 Installing the blower housing on the adapter

– Only for LogWIN with flue connection adapter (accessories)

– First screw the 4 included M8x16 hexagon screws into the blower housing from the inside, the attach the blower housing with seal, 4 nuts and washers to the adapter – Fig. 47.

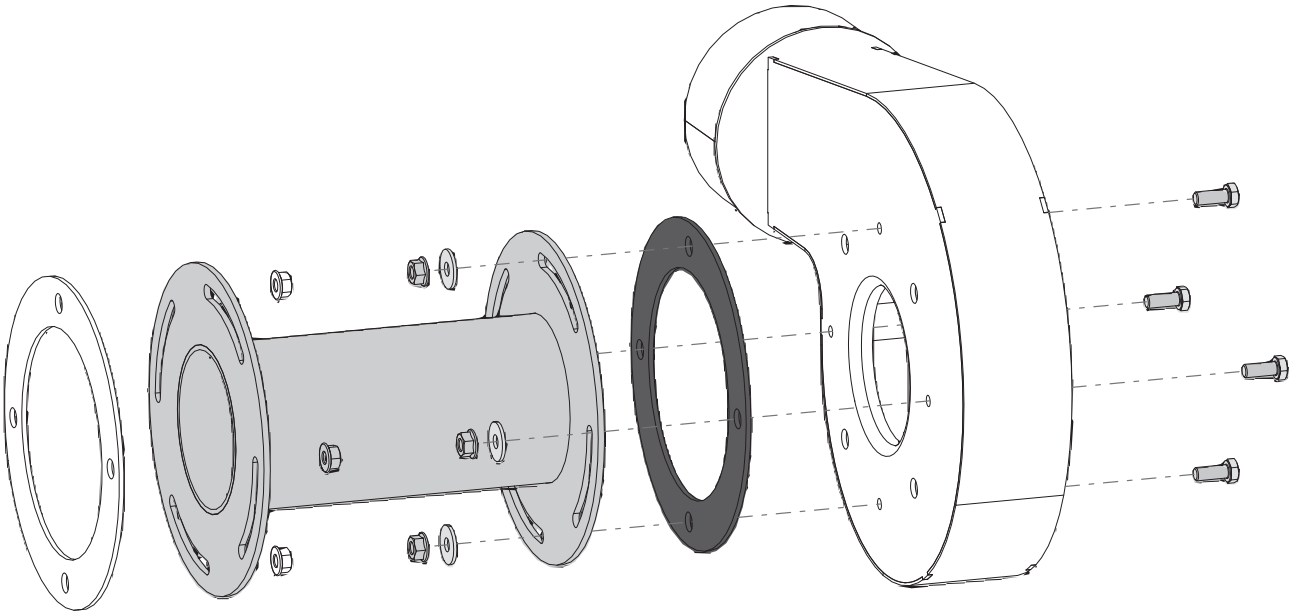


Fig. 47 Installing the blower housing on the adapter

2.3.19 Installing the lever for cleaning heating surfaces

only for LogWIN Klassik **without** pellet ready:

– Depending on accessibility, either install lever for cleaning heating surfaces on the left or right side. Punch through the cut-out, insert lever through opening in side panel (Fig. 48) and slide inwards through the cleaning heating surfaces axle (limit stop must face upwards – Fig. 49) and secure with Cylinder screw with hexagon socket M8x30 (inserted only) – Fig. 49. Push the grommet into the cladding – Fig. 48.

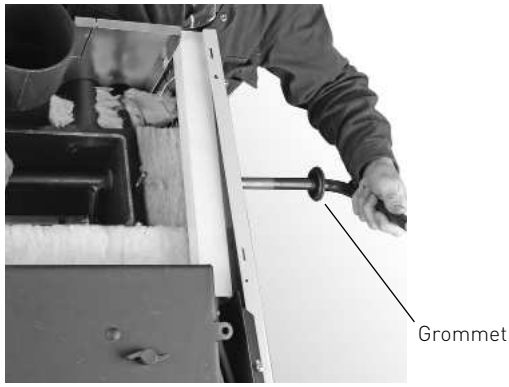


Fig. 48 Punching through the cut-out, inserting lever for cleaning heating surfaces through opening

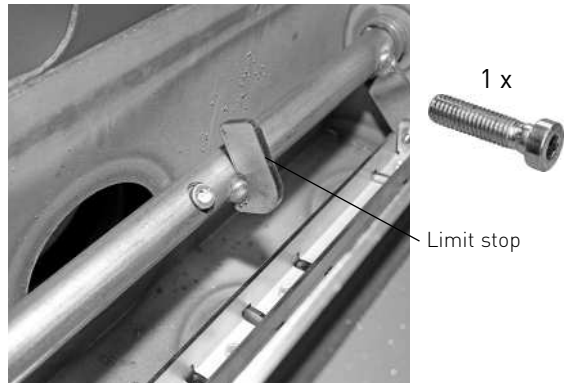


Fig. 49 Sliding lever through axle and securing with screw (inserted only)

2. For the Installer

only for LogWIN Klassik **pellet ready**:

– Push the heating-surface cleaning lever into slot at front left of the side panel (Fig. 50), screw to the shorter lever with a hexagon screw M8x25, U-washer 8 and lock nut M8 – but **DO NOT** tighten screw, the rods must be free to move (Fig. 51). Next, push down behind the side panel – Fig. 52.

Fig. 50 Insert the heating-surface cleaning lever into the slot in the side panel

Fig. 51 Screw the levers together but do not tighten screws as the rods must be able to move

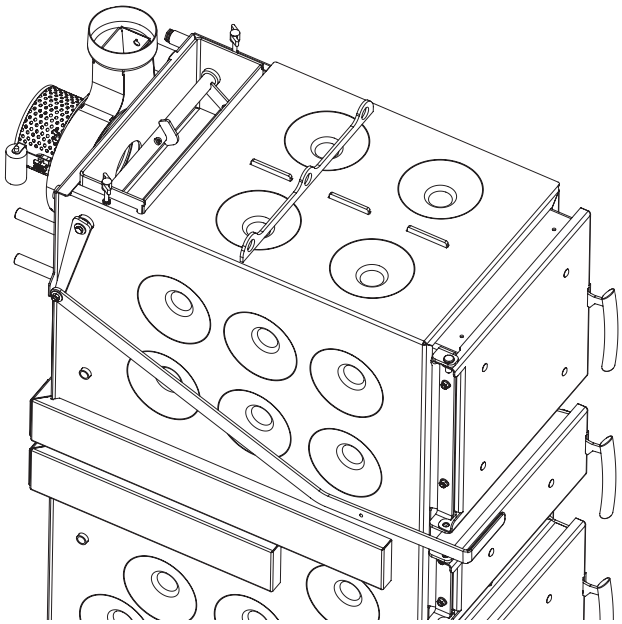


Fig. 52 Heating-surface cleaning lever is mounted behind the side panel of the LogWIN Klassik pellet ready

– Screw both shafts together in the axle (limit stop must face upwards) using a cylinder screw with hexagon socket M8x30. Do not screw the axle to the shaft – Fig. 53.

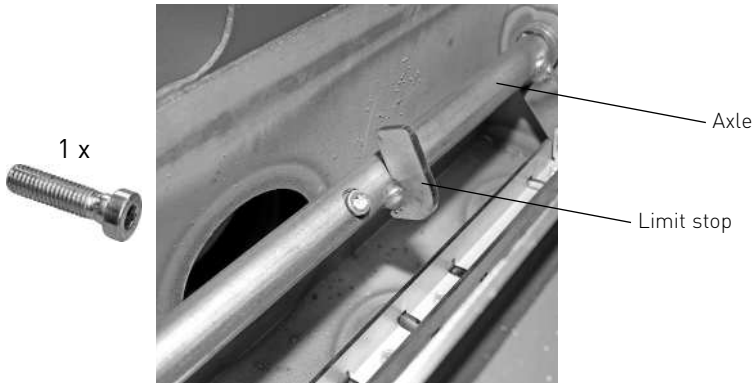


Fig. 53 Screw the shafts together in the axle

2.3.20 Installing the control panel

- Before the control panel is installed, the InfoWIN cable must be routed from the control panelat the front left – Fig. 54.
- Route the cable from the door switch (on the control panel) at the front right into the control panel and connect Plug X15 – Fig. 55.
- Loosely screw the control panel to the side panels (2 x) and control panel (2 x) with self-tapping screws – Fig. 56.
- Connect the InfoWIN cable and route into the side panel – Fig. 56.

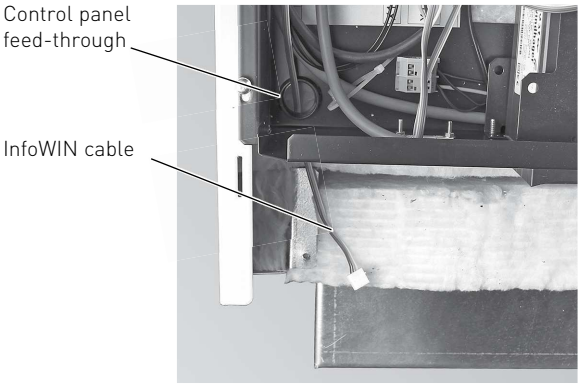


Fig. 54 Threading the InfoWIN cable through

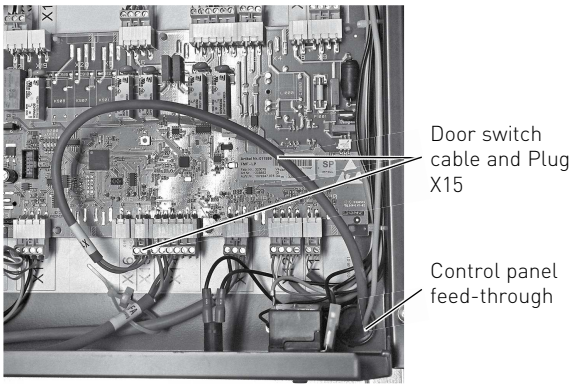


Fig. 55 Inserting the cable from the door switch and connecting to Plug X15.

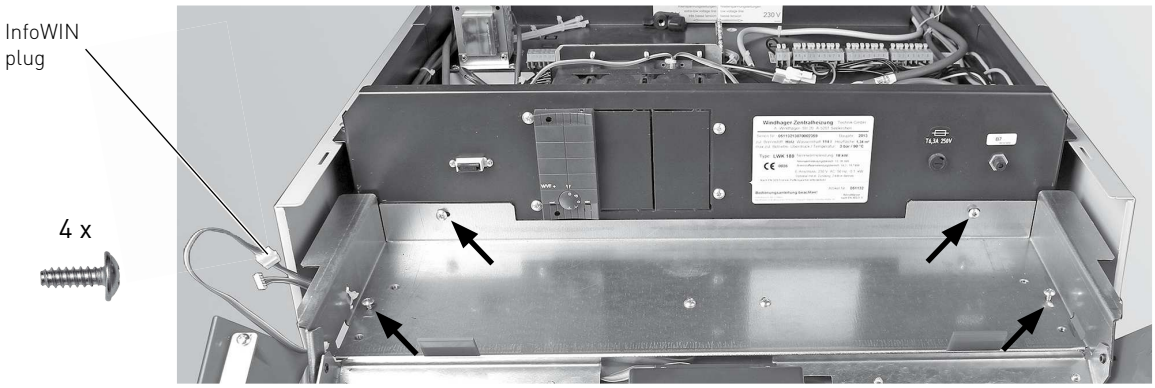


Fig. 56 Attach the control panel with 4 self-tapping screws, route InfoWIN cable.

2.3.21 Installing the cladding door

Note!

The cladding door and the boiler doors are designed for door catches on either the left or right. Standard delivery always includes door catches on the left. The catches on the cladding door and boiler doors must be on the same side.

Hook the cladding door in at the upper and lower door hinges (Fig. 57) and fasten the upper door hinge with 2 washers and M6x10 hexagon screws – Fig. 58.

Fig. 57 Lower cladding door on door hinge

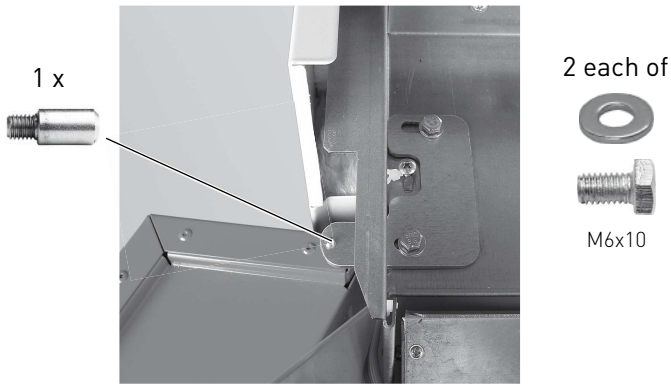


Fig. 58 Upper cladding door with door hinge

– Press 2 magnetic catches top/bottom into the side panel to align with the door catch side – Fig. 59.
– Install 2 magnet retainers top/bottom in the cladding door with 2 self-tapping screws each – Fig. 59.

Fig. 59 Screw the hinge into the cladding door with 2 self-tapping screws on each side, press 2 magnetic catches into place

2.3.22 Adjusting the cladding

– Adjust side panels, cladding door and control panel visually by the width of the cladding door or equal gap size and tighten all screws – Fig. 60.

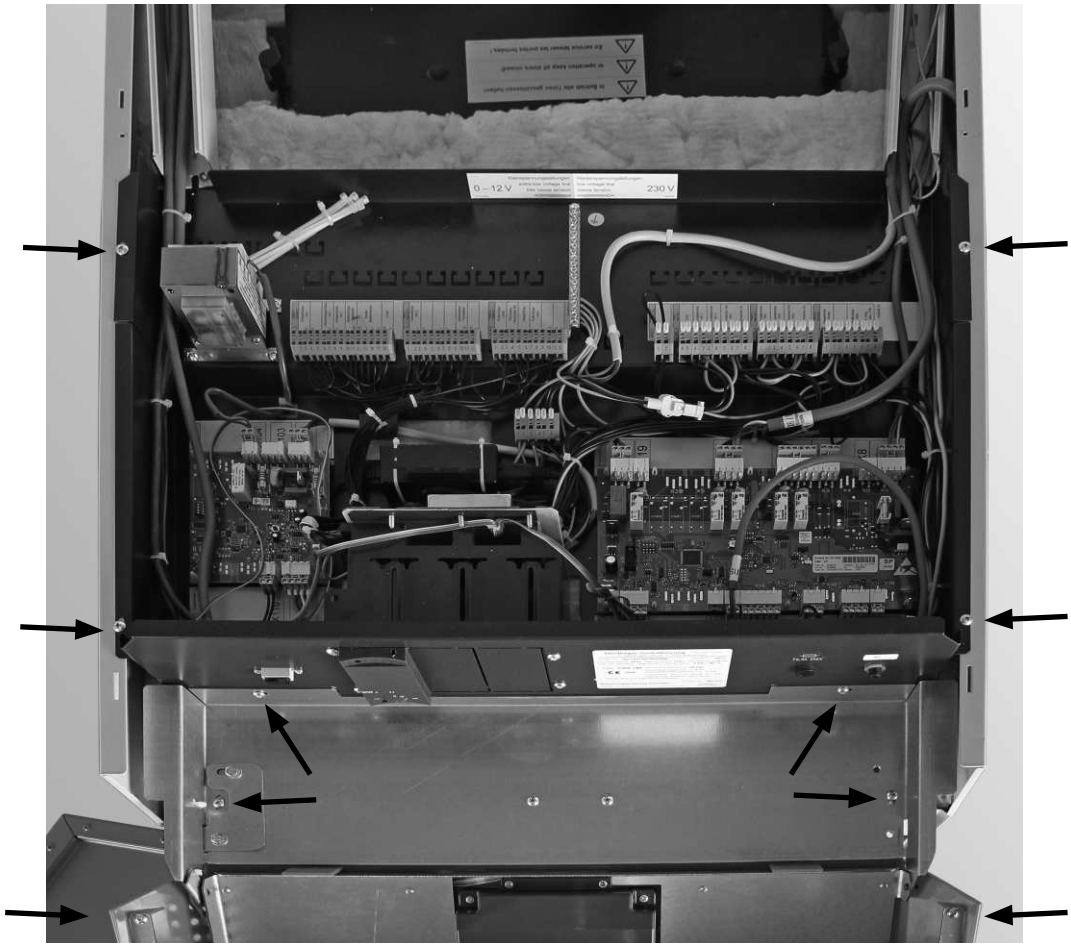


Fig. 60 Adjusting cladding, tightening all screws

2.3.23 Checking the cladding door switch

– When closing the cladding door, the cladding door switch must still have sufficient shifting travel after switching (audible clicking) before the cladding door is totally closed – Fig. 61. If necessary, use a screwdriver at the top inside the control panel to reset – Fig. 62.

Fig. 61 Door switch must click

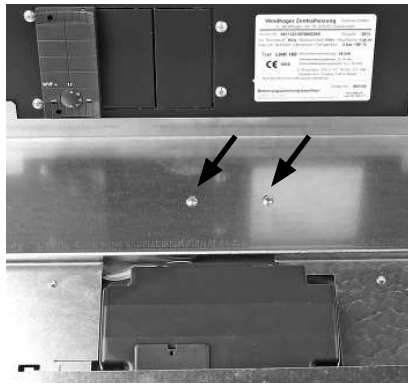


Fig. 62 Reset door switch with screws

2.3.24 Mounting the front boiler cover

– Hook the front boiler cover into the side panels (Fig. 63) and attach at rear with 2 self-tapping screws – Fig. 64.

Fig. 63 Hinging in boiler cover

Fig. 64 Securing boiler cover in 2 places

2.3.25 Mounting the rear boiler cover

– If no adapter for the flue gas blower (accessories) is being used, break off the cut-out at the rear of the boiler cover – Fig. 65. large cut-out = exhaust pipe insulated
small cut-out = exhaust pipe not insulated
do not break off = adapter for flue connection installed

– Hook the rear boiler cover into the slot provided on the side panel cladding – Fig. 66.

Fig. 65 If no adapter for the flue connection is being used, break off the cut-out

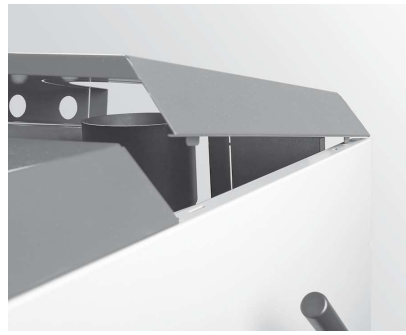


Fig. 66 Hooking in the rear boiler cover

2.3.26 Instructions, cleaning and operating implements

– Install the hanger with the instructions folder, cleaning and operating implements on a side panel of the boiler (Fig. 67) or on a wall in the boiler room/installation room.
– Keep ash pan under boiler.

Supplied as standard:

1.....Instructions
4.....Scratcher
7.....Ash pan

Optional accessory: cleaning kit EWK 020:

3.....Hanger (for installation on the wall or boiler side panel)
2.....Spatula
5.....Cleaning brush
6.....Poker

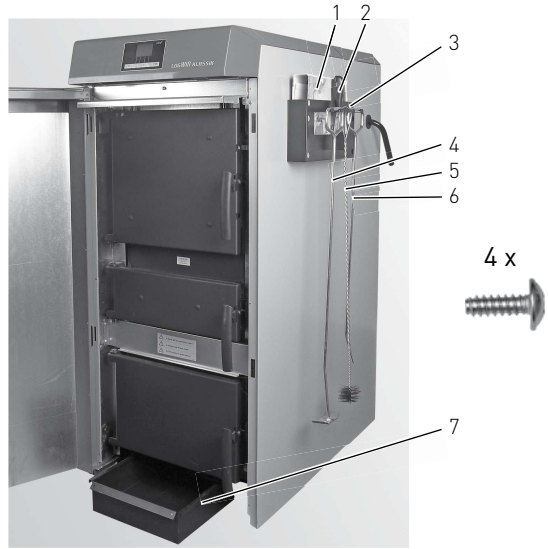


Fig. 67 Fitting hanger, ash pan under boiler

2.3.27 Installing the exhaust pipe

a) Install the exhaust pipe upward to the flue (45° is the ideal angle). Maximum exhaust pipe length to flue 3 m.

Information!

Any section of this exhaust line that only rises slightly (up to 30°) or is horizontal is not allowed to be more than 1 m in length.

b) Avoid 90° bends, 45° bends are better

c) Do not push the exhaust pipe too far into the flue.

d) Do not seal the exhaust pipe completely into the flue. Connection with flexible exhaust pipe inlet into the flue. The vacuum fan can cause sound transmissions that create noise pollution.

e) The LogWIN is a low-pressure boiler. This means that the flue gas system needs to meet the „N1" seal integrity requirement according to EN 1856-1 and EN1856-2. Please ensure a sufficient immersion depth when fitting (e.g. when using Windhager stainless steel flue systems).

f) The entire exhaust line should be insulated to a minimum of 2 cm thickness in order to prevent or minimise condensation.

g) A draught limiter is needed if the maximum draught (see technical data in section 4.4.) is exceeded during operation.

Note!

We would recommend fitting outside the flue around ½ m below where the exhaust pipe intersects with the flue.

Attention!

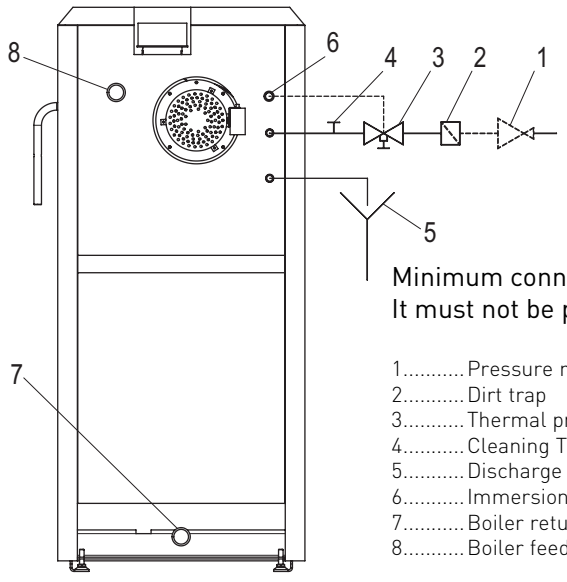
The configuration of the exhaust line must comply with technical fire protection requirements in accordance with the applicable legislation, regulations, guidelines and standards – refer also to section 2.3.3. Minimum clearances for fire protection, cleaning and maintenance.

2.3.28 Installing the thermal process safeguard

Connecting thermal process safeguard to thermal safety device

a) The thermal process safeguard and cleaning T-piece must still be accessible after installation.
b) The drain must be visible in order to check the function, therefore use a discharge funnel.
c) It must not be possible to block the connection manually.

Connection according to EN 303-5:



Minimum connection pressure of the thermal safety device: 2 bar.
It must not be possible to block the connection manually.

1..... Pressure reducing valve (only with CW connection of more than 6 bar)
2..... Dirt trap
3..... Thermal process safeguard (opens at approx. 95 °C)
4..... Cleaning T-piece
5..... Discharge funnel
6..... Immersion sleeve for the sensor of the thermal process safeguard
7..... Boiler return
8..... Boiler feed

Fig. 68 Thermal safety device connection

3. For the Electrician

3.1 Electrical connections

The boiler and related accessories are designed to be installed only in dry areas (protection type IP 20). Installation of electrical components may only be performed by a qualified technician. The regulations and specifications of ÖVE, VDE, SEV and local ordinances must be followed.

Attention!

- The phases of the 230 V electrical power supply must be connected correctly, otherwise the blower might still be live even after the fuse has blown.
- The mains connection must be protected against short circuit with a 13 A delayed-action fuse.

We recommend using fine-wire PVC sheathed cables, e.g., H05VV-F (YMM-J) with a 3x1.5 mm^2 nominal crosssection.

The boiler is pre-wired and internally fused with a T 6.3 A fine-wire fuse to protect against short circuit.

By special order, up to 3 MESplus modules (including boiler sensor) will be installed in the control panel and wired at the factory – Fig. 69. if there are more than 3 modules, they are installed in the wall-mount casing (accessory: MES 004) and need to be electrically wired on site.

Maximum MESplus module switching capacity: Relay outputs: 230 V AC, 6 A (2 A inductive), 50 Hz
WVF+ modules with X1/X2 contact: Solid-state relay: 230 V AC, 1 A

The electrical rating is dependent upon the number of modules installed in the unit, that is, the number of actuators powered (pumps, mixing valves, etc.).

In areas with increased power surge risk (e.g., lightning strikes in regions prone to storms), we recommend installation of an appropriate surge protector.

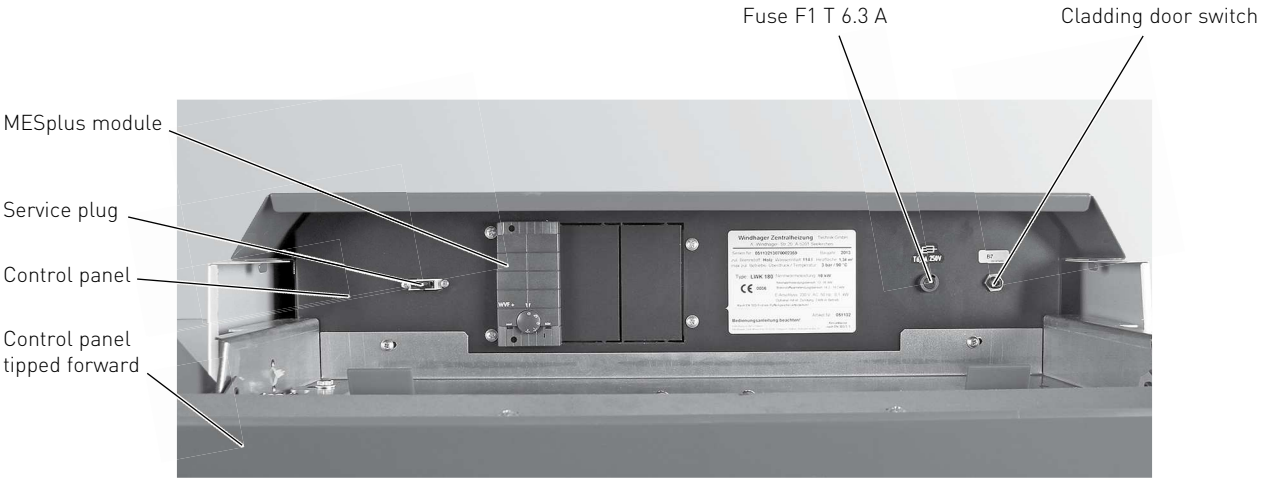


Fig. 69 Control panel LogWIN Klassik

Information!

Electrical cables must not touch heating and exhaust pipes, nor must they come in contact with non-insulated boiler components. They are to be sufficiently braced and provided with a protective tube.

All electrical connections are located in the control panel. The control panel at the front contains the LogWIN main board while the control panel at the rear contains the connection terminals (screwless spring-type terminals) for connecting the MESplus control.

3. For the Electrician

– Remove rear boiler cover (Fig. 70), loosen 2 screws from front boiler cover (Fig. 71) and lift up cover and pull off to the rear – Fig. 72.

Fig. 70 Removing the rear boiler cover

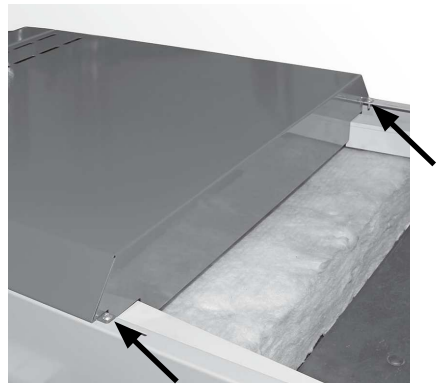


Fig. 71 Loosen 2 screws

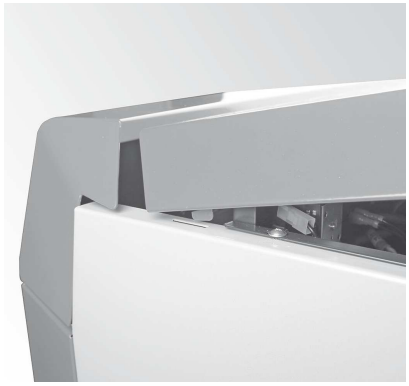


Fig. 72 Lifting boiler cover and pulling off to the rear

– Check 4-pin plug on InfoWIN cable, route to left side from control panel as necessary (see also 2.3.19), connect and route in side panel – Fig. 73.

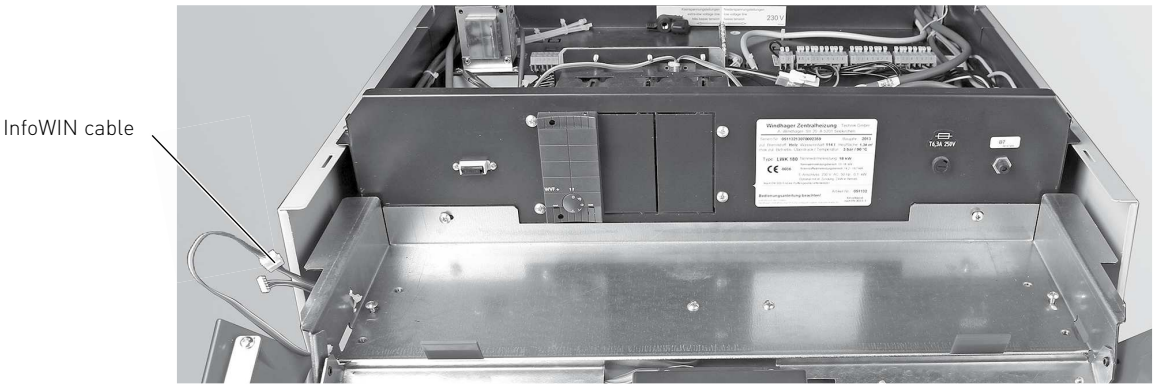


Fig. 73 Connect InfoWIN cable if necessary and route in side panel

3. For the Electrician

– Make sure that the plugs for the door switch, flue gas sensor (accessories) and air control are correctly connected in the control panel. Cables and plugs are inscribed – Fig. 74.

– The connections for the MESplus system control are on the terminal blocks (screwless spring-type terminals) at the rear in the control panel and should be connected with fine-wire PVC sheathed cables – Fig. 74.

Information!

Be sure to note the separate wiring of the extra-low voltage line (0–12 VDC) and low-voltage line (230 V AC)! Route cables in the cable ducts available – Fig. 74.

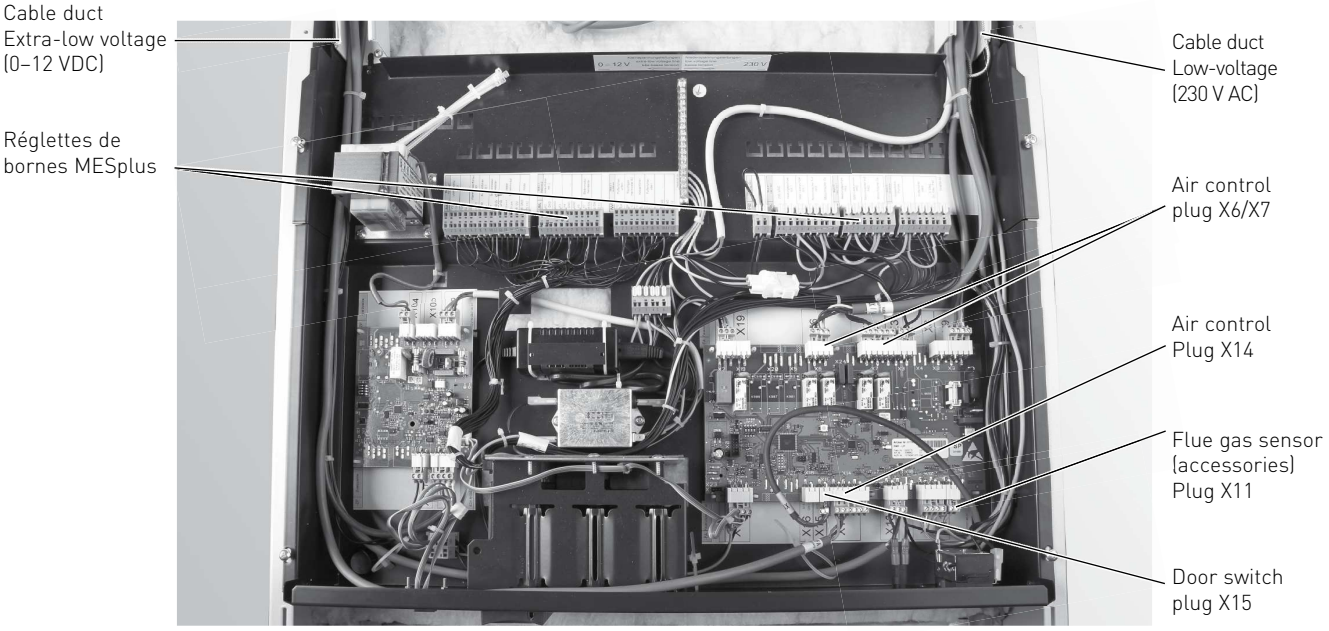


Fig. 74 Control panel open, connecting plugs – front view

Information!

Electrical cables should be routed in the cable ducts intended for this purpose and are not allowed to be routed over the cleaning cover. The space above the cover must be accessible for cleaning.

Connecting automatic ignition (accessory)

see separate assembly instructions provided.

Information!

After connecting the cables, remove any remaining assembly materials (e.g., wire cuttings) from the control panel.

– Hook the front boiler cover into place (Fig. 75) and attach with 2 screws – Fig. 76.

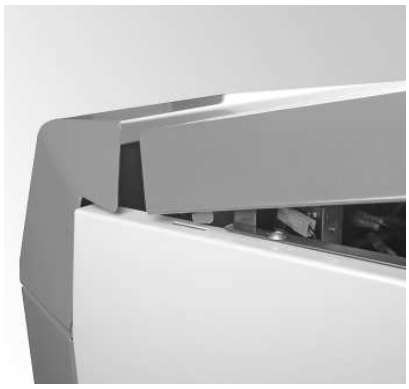


Fig. 75 Hooking in the front boiler cover

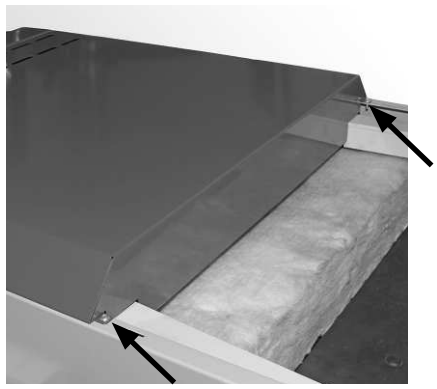


Fig. 76 Securing with 2 screws

– Insert the rear boiler cover into the slot provided on the side panel – Fig. 77.
– Connect or plug in the mains power plug at the rear of the boiler – Fig. 78.

Fig. 77 Hooking in the rear boiler cover

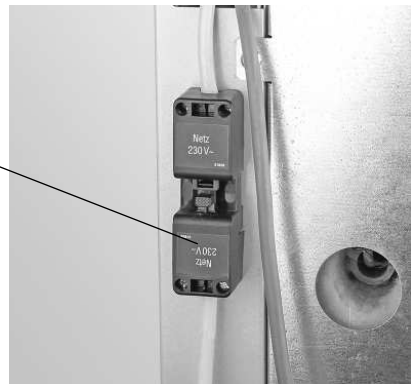


Fig. 78 Insert or connect the power plug

4. For the Service Technician

4.1 Start-up and operating instructions

The Windhager Customer Service or Partner Customer Service will start up the boiler and will familiarize the customer with the system operator and cleaning of the boiler. Start-up and maintenance are part of the guarantee requirements of the "warranty conditions" – see also section 1.4.
We recommend that you obtain a maintenance service contract.

4.2 Service and repair work

Service and repair may be performed only by appropriately qualified technicians.

Attention!

De-energise the boiler before opening the control panel for service or repair purposes. Unplug power plug – Fig. 79.

Switching off the on/off button on the InfoWINplus does not mean the boiler and its accessories are completely without power! When replacing system components (pumps, mixing valves, etc.) prevent all power input (e.g. by removing the mains power plug).

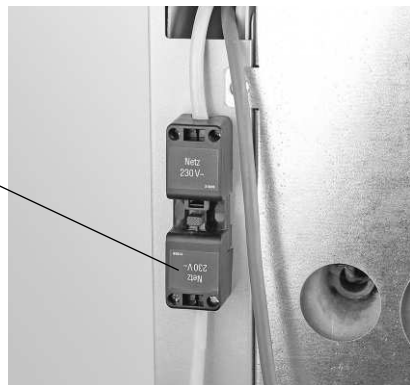


Fig. 79 Disconnecting plugs

4.3 Checking and servicing the thermal process safeguard

(Please inform your customer)

Attention!

The function of the thermal process safeguard must be checked once a year by a technician and the amount of limescale in the thermal safety device must be checked. If there is limescale in the thermal safety device then it must always be removed.

- Press the red cap against the valve (Fig. 80) > Water must flow out into the funnel.– Little outflow at funnel > Limescale in thermal safety device (pump limescale remove – e.g. formic acid – through the thermal safety device).
- Thermal process safeguard dripping > Clean the seal on the piston and valve seat. If the seal is damaged > Renew the piston.

  Note: There is no need to remove the fitting for this purpose!

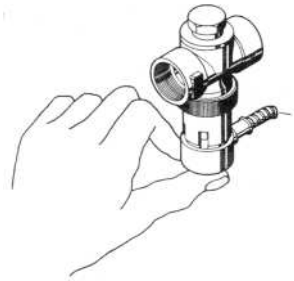


Fig. 80 Thermal process safeguard,
Press the red cap against the valve

4.4 Technical data for calculating the flue gas system acc. to EN 13384-1 (for LWK 180–300)

LogWIN Klassik wood gasification boiler	Formula symbols	Unit	LWK 180		LWK 250		LWK 300	
			min.	max.	min.	max.	min.	max.
Values in practical operation (Average between two cleaning intervals)								
Nominal thermal output	Q_N	kW	15	18	15	25	15	30
Nominal heat load (firing thermal output)	Q_B	kW	17	19,3	17	27,2	17	33,8
Volume concentration of CO_2	σ (CO_2)	%	14,2	15	14,2	14,7	14,2	14,5
Flue gas mass flow rate	$\dot{m}$	kg/s	0,0095	0,0106	0,0095	0,0150	0,0095	0,0183
Flue gas temperature	T_W	°C	110	160	110	180	110	195
Necessary feed pressure	P_W	Pa	5	10	5	10	5	10
Flue gas connection diameter	Ø	mm	130	130	130	130	130	130

4.5 Technical data – General (for LWK 180–300)

LogWIN Klassik wood gasification boiler		Unit	LWK 180	LWK 250	LWK 300
Boiler class according to EN 303-5:2012			5		
Nominal thermal output range		kW	15–18	15–25	15–30
Fuel type to EN 303-5:2012	permissible		A, C2[1]		
Fuel water content	permissible	%	15–25		
Burn duration at rated load/part load	Beech Spruce	h	6,5 / 7,8 4,3 / 5,2	4,7 / 7,8 3,1 / 5,2	3,9 / 7,8 2,6 / 5,2
Filling chamber	W x D x H Beech/spruce	mm l kg	394 x 562 x 640 145 37 / 24		
Filling door dimensions	W x H	mm	430 x 397		
Feed pressure during operation (draught requirement)	Necessary Maximum	mbar	0,10 0,20		
Boiler temperature control range		°C	62–87		
Boiler set temperature		°C	80[2]		
Return temperature	min.	°C	61		
Water-side resistance	ΔT = 20 °K ΔT = 10 °K	mbar	2,1 7,2	3,4 14,0	5,5 20,0
Operating pressure	max.	bar	3		
Test pressure		bar	4,5		
Boiler water volume		l	114		
Weight of boiler	net	kg	499		
Minimum transport weight[3]		kg	430		
Installation dimensions	W x D x H	mm	588 x 1120 x 1437		
Minimum installation dimensions[4]	W x D x H	mm	588 x 967 x 1340		
Electrical power consumption	Operation Standby Igniting	W	43 7 2000	49 7 2000	53 7 2000
Values from type test with beech	**Testing office TÜV SÜD Munich, test report no.: 1348-01/13)**				
Boiler efficiency		%	90,9	90,7[5]	90,5
Flue gas temperature	rated load part load	°C	121 95	135[5] 95	145 95

[1] see operating manual, Fuels section
[2] ssee point 2.2.1.
[3] by removing parts which are easy to disassemble (e.g. doors, hook-in plates, burnthrough plates, heating surface cleaning etc.).
[4] without doors, cleaning cover and flue gas blower
[5] interpolated values

4.6 Dimensional sketches

Flue gas blower directly on boiler, flue connection at top

All dimensions in mm:

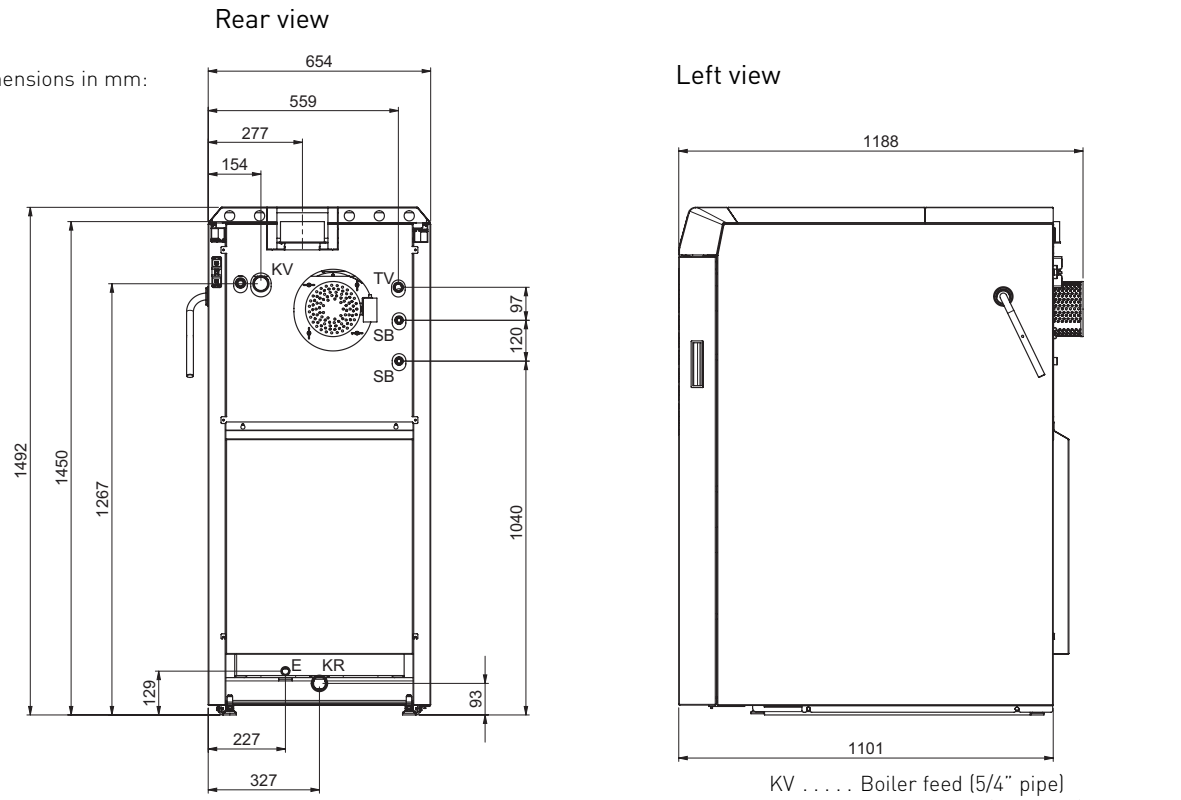


Fig. 81 LogWIN Klassik flue gas blower directly on boiler

KV . . . . . Boiler feed (5/4" pipe)
KR . . . . . Boiler return (5/4" pipe)
TV . . . . . Thermal valve sensor (1/2" sleeve)
SB . . . . . Thermal safety device (1/2" tube)
E . . . . . Discharge

Blower housing with adapter, flue connection steplessly adjustable from left to right

All dimensions in mm:

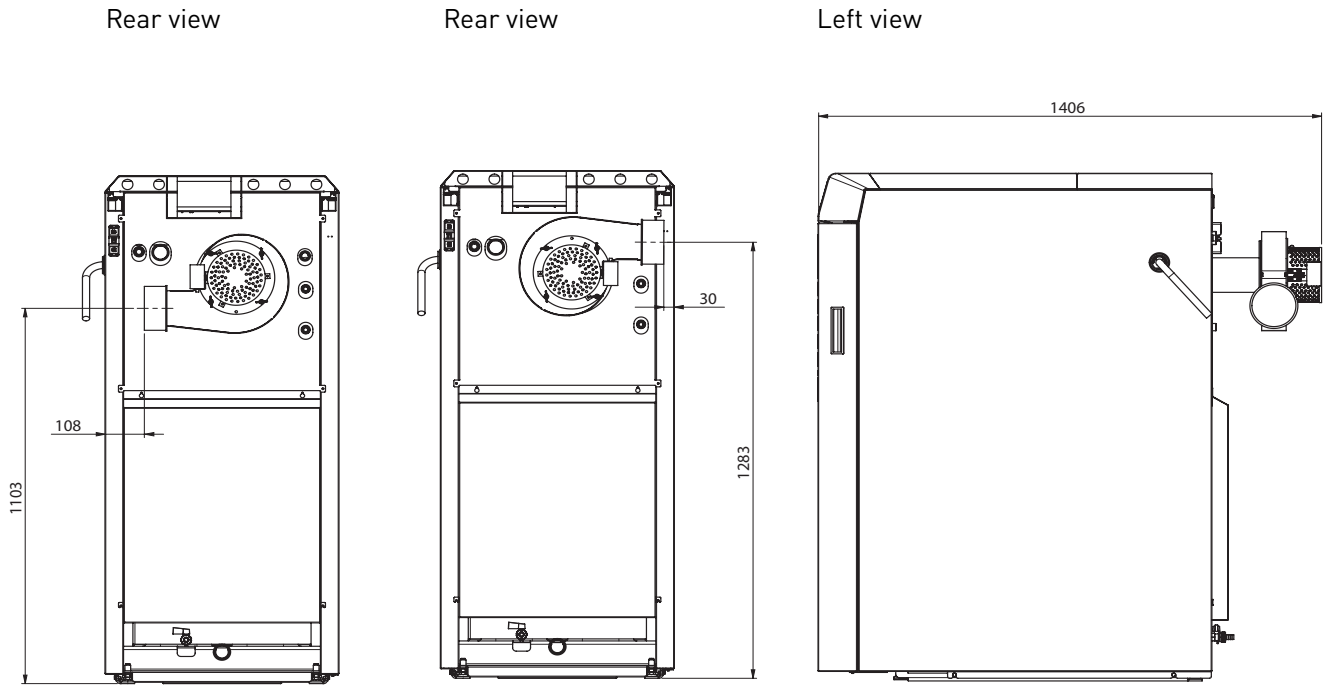


Fig. 82 LogWIN Klassik flue gas blower with adapter on boiler

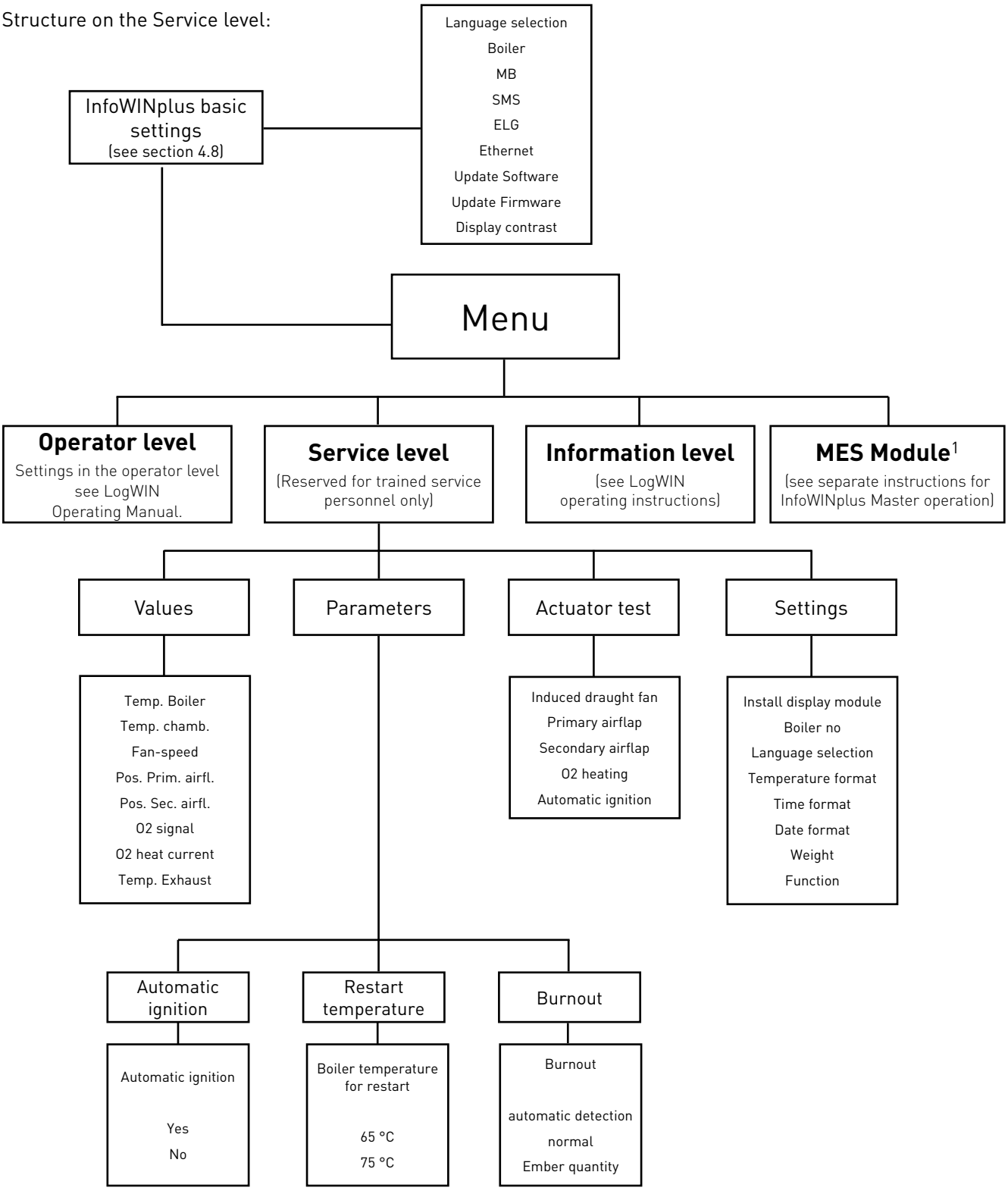
4.7 Service level

Values, restart temperature, burnout, language and actuator test can be displayed and modified on the Service level.

Information!

Only trained service personnel may perform system modifications on the Service level.

Structure on the Service level:



1 only displayed when an MESplus control is present and this has been adjusted by a trained service technician in the basic settings.

Service level

Pressing the **Menu** button (Fig. 83) shows the „Operator level", „Service level", „Information level" and „MES Module[1]" in the display – Fig. 84.

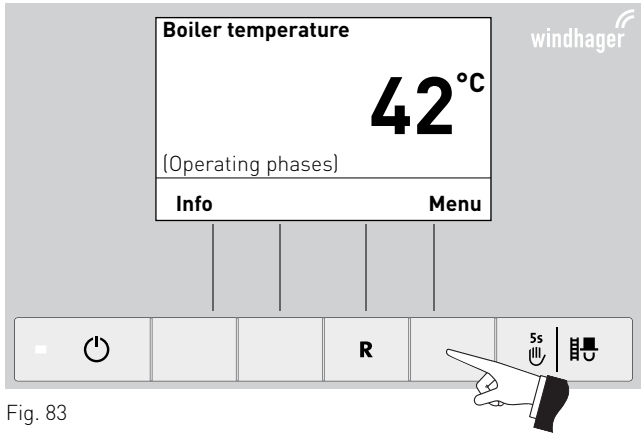


Fig. 83

Use the **arrow** buttons to select the "Service level" submenu – Fig. 74.

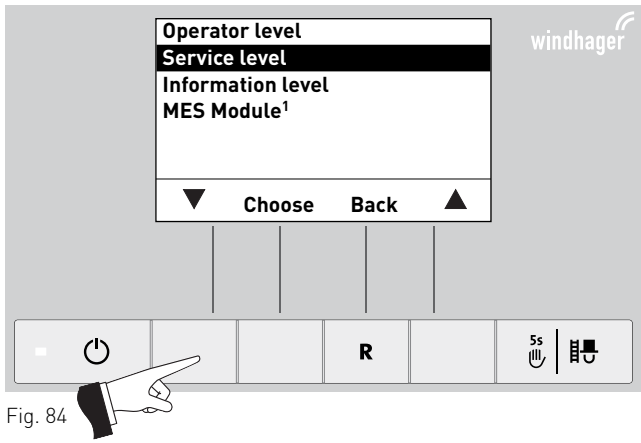


Fig. 84

Press and hold the **Choose** button for 5 seconds (Fig. 85). The display shows „Service level only for trained service personnel" – Fig. 86.

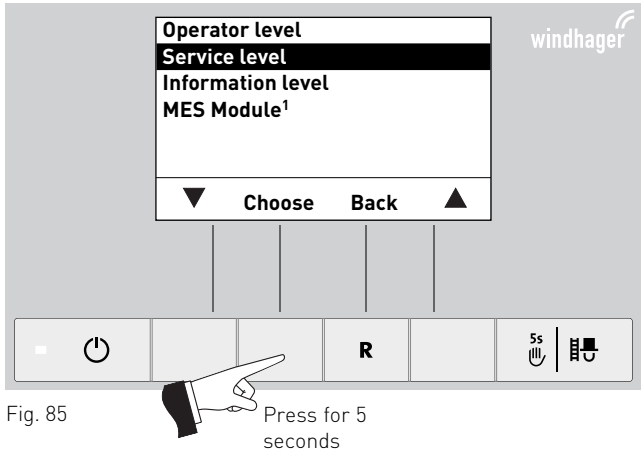


Fig. 85 Press for 5 seconds

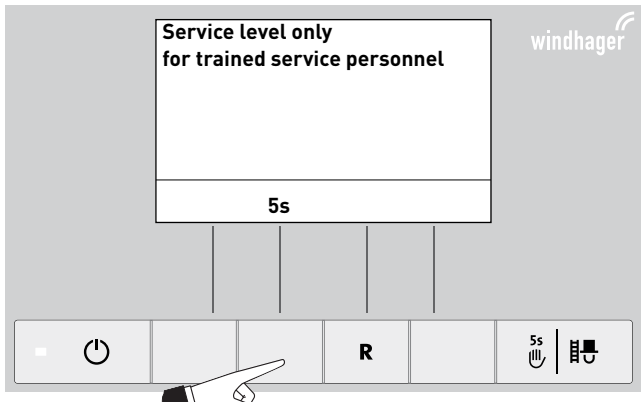


Fig. 86 Press for 5 seconds

1 only displayed when an MESplus control is present and this has been adjusted by a trained service technician in the basic settings.

Select the required item, „Values“, „Parameters“, „Actuator test“ or „Settings“ and confirm by pressing the **Choose** button – Fig. 87.
For further settings, see sections 4.7.1 - 4.7.4.

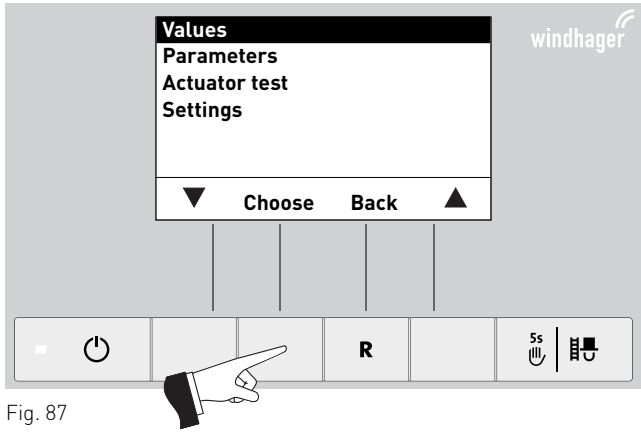


Fig. 87

The menu item or sub-menu item is exited by pressing the **Back** button or after a delay of 10 minutes – Fig. 88.

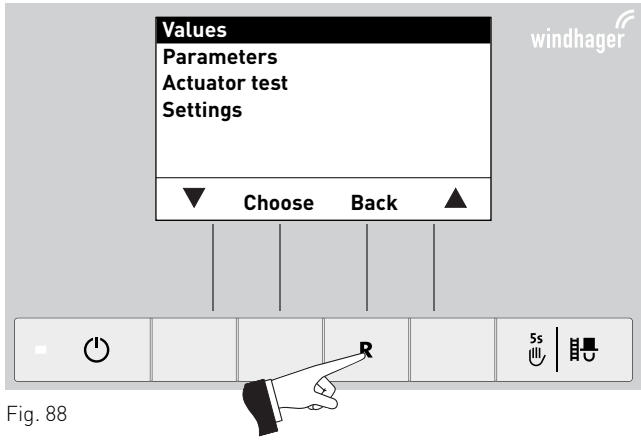


Fig. 88

4.7.1 Values

The following values are displayed:

Temp. Boiler
The current boiler temperature is displayed in °C.

Temp. chamb.
The current temperature in the combustion chamber is displayed in °C.

Fan-speed
The nominal speed of the blower is displayed in rpm.

Pos. Prim. airfl.
The position of the primary air choke is displayed in %.

Pos. Sec. airfl.
The position of the secondary air choke is displayed in %.

O2 signal
The O2 signal of the lambda sensor is displayed in %.

O2 heat current
The O2 heat current of the lambda sensor is displayed in A.

Temp. Exhaust
The current flue gas temperature is displayed in °C.

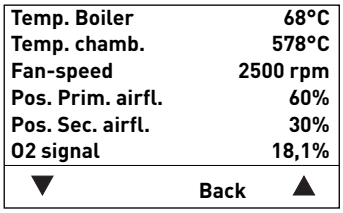


Fig. 89

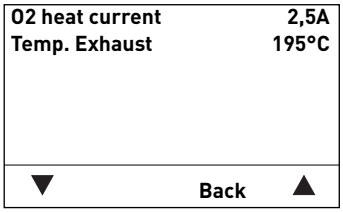


Fig. 90

4.7.2 Parameters

The following parameters can be selected with the **arrow** buttons, then confirmed using the **Choose** button.

- Automatic ignition
- Restart temperature
- Burnout

Automatic ignition

This adjuster is used to set whether electric ignition is present or not.

Factory setting: depending on condition upon delivery

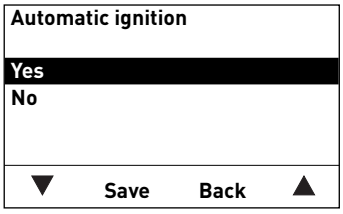


Fig. 91

Restart temperature

The blower switches off if the boiler temperature is too high. The restart temperature is the temperature at which the blower switches back on and the boiler resumes normal heating operation.

Factory setting: 75 °C
Possible settings: 65 °C or 75 °C

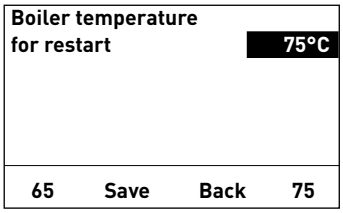


Fig. 92

Burnout

- **automatic detection**
  Burnout characteristics are determined by MESplus thermal distribution module WVF+. If only "Solid fuel operation" is set on the WVF+, "Burnout" with embers maintenance is undertaken. With all other settings on the WVF, a normal burnout is undertaken.
- **normal**
  A normal burnout is always undertaken, i.e. the wood is burnt as best as possible until no more remains without embers maintenance.
- **Ember quantity**
  Burnout with embers maintenance is always undertaken, i.e. basic embers are maintained to make it easier to light up again.

Factory setting: normal

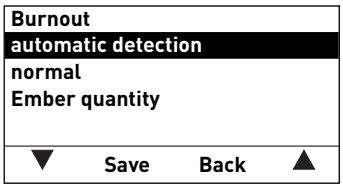


Fig. 93

4.7.3 Actuator test

The following actuators can be selected with the **arrow** buttons, then confirmed and started using the **Choose** button. The actuators are switched off again after 1 minute. A self-test is started at the end of an actuator test.

- Induced draught fan
- Primary airflap
- Secondary airflap
- O2 heating
- Automatic ignition

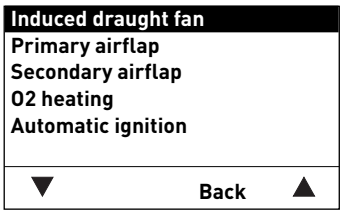


Fig. 94

4.7.4 Settings

This sub-menu contains the following settings:

- Install display module
- Boiler no.
- Language selection
- Temperature format
- Time format
- Date format
- Weight
- Function

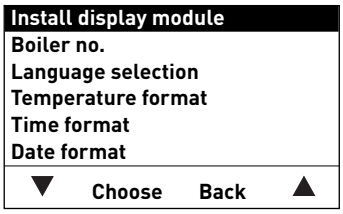


Fig. 95

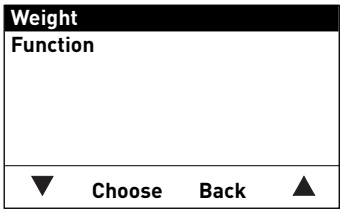


Fig. 96

Boiler no

This is not required for the LogWIN.

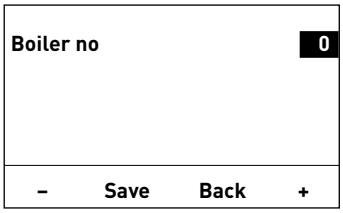


Fig. 97

Install display module

This is not required for the LogWIN.

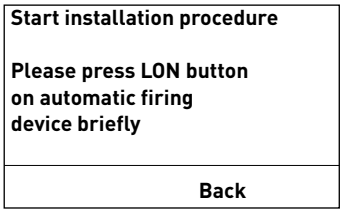


Fig. 98

Language selection

The InfoWINplus can show the display texts in various languages. The language required can be selected in this sub-menu.

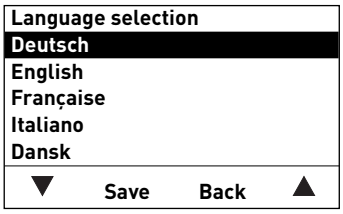


Fig. 99

Temperature format

All temperatures are displayed in the chosen format (e.g. 30.6 °C or 87.0 °F).

Factory setting: °C
Selection: °C and °F

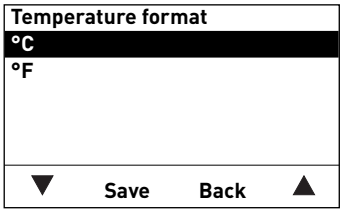


Fig. 100

Time format

The time is displayed in the chosen format (e.g. 14:12 or 02:12 PM).

Factory setting: 24 h
Selection: 24 h or 12 h

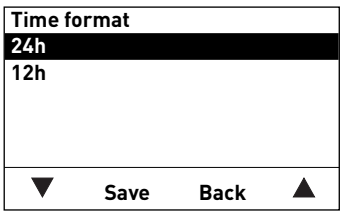


Fig. 101

Date format

The date is displayed in the chosen format (e.g. Wed 17.02.2010 or Wed 02/17/2010).

Factory setting: DD.MM.YYYY
Selection: DD.MM.YYYY
MM/DD/YYYY

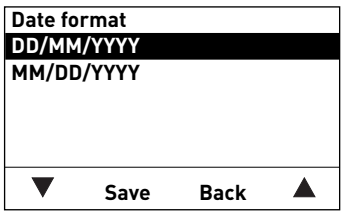


Fig. 102

Weight

The weight is displayed in the chosen format (e.g. 6.5 kg or 14.3 lbs).

Factory setting: t, kg
Selection: t, kg or tn. sh., lbs

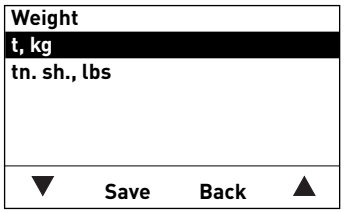


Fig. 103

Function

The name (e.g. LogWIN) of the boiler can be changed via „Function“.

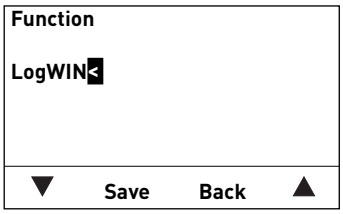


Fig. 104

4.7.5 Installation of MESplus modules

Display if an MESplus module is installed (connected) or uninstalled (disconnected)

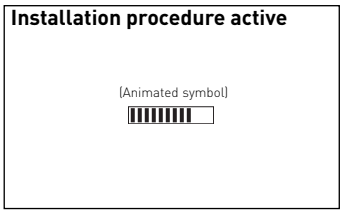


Fig. 105

4.8 InfoWINplus basic settings

The basic settings are used to

- set whether the InfoWINplus controls a wood or pellet boiler or whether it is solely used as master operation;
- switch the master operation functions on and off;
- activate/deactivate remote switching by text message.

The basic settings are undertaken in the factory before delivery as per the order.

Information!

Only trained service personnel may perform modifications in the basic settings.

The display switches to the basic settings when „Version ....“ (Fig. 107) is displayed and the button (shown in Fig. 107) is pressed for 5 seconds.

„Version ...“ is displayed,
- if the „R“ button is pressed for 5 seconds on a standard display – Fig. 106;
- if the InfoWINplus was de-energised and then switched on.

The following settings are available in the basic settings:

- Language selection
- Boiler
- MB
- SMS
- ELG
- Ethernet
- Update Software
- Update Firmware
- Display contrast

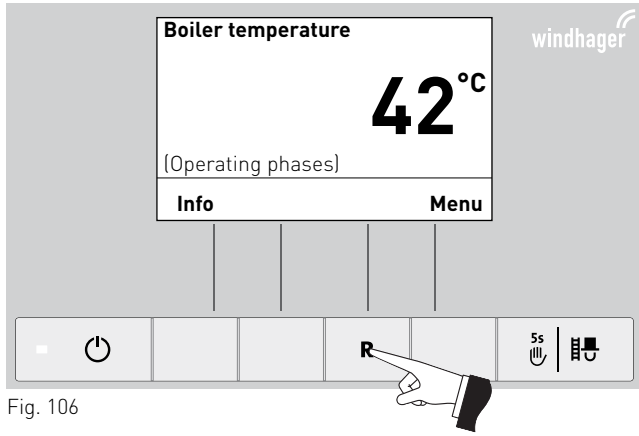


Fig. 106

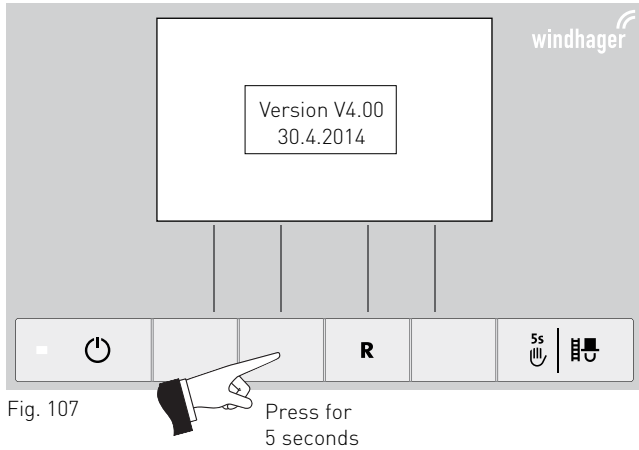


Fig. 107

Language selection	**English**
Boiler	**No**
MB	**No**
SMS	**No**
ELG	**No**
Ethernet	
▼ **Choose** **Back** ▲	

Fig. 108

Language selection

The InfoWINplus can show the display texts in various languages. The language required can be selected in this sub-menu.

Language selection
Deutsch
English
Française
Italiano
Dansk
▼ **Save** **Back** ▲

Fig. 109

Boiler

Setting to determine what kind of boiler the InfoWINplus controls, e.g. wood or pellet boiler or whether it is solely used as master operation.

Factory setting: is set in the factory before delivery as per the order.

Selection:

Pellets:	BioWIN, BioWIN XL, FireWIN, VarioWIN usw.
Wood:	LogWIN, SilvaWIN usw.
Heating oil:	JetWIN, EcoWIN
Combi boiler:	DuoWIN
No	No boiler, e.g. for MultiWIN, simply master operation for remote switching

Boiler
Pellets
Wood
Heating oil
Combi boiler
No
▼ **Choose** **Back** ▲

Fig. 110

MB (Master operation)

Setting to define whether MESplus system control is present.

Factory setting: is set in the factory before delivery as per the order.
Selection: yes: with MESplus system control
no: no MESplus system control

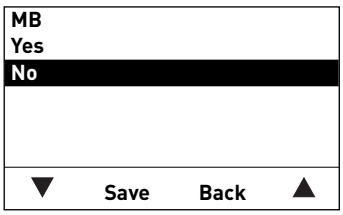


Fig. 111

SMS

is set in the factory before delivery as per the order.

Factory setting: wird je nach Bestellung werkseitg vor der Auslieferung eingestellt.
Selection: yes: with remote switching
no: no remote switching

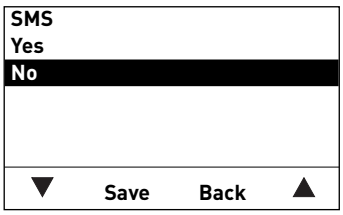


Fig. 112

ELG

These functions are not yet available.

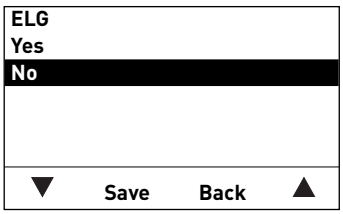


Fig. 113

Ethernet

Setting the IP address, subnet mask and gateway address of the Ethernet interface of InfoWINplus.

Factory setting:		
	IP-Adresse	192.168.1.2
	Subnet	255.255.255.0
	Gateway	255.255.255.255

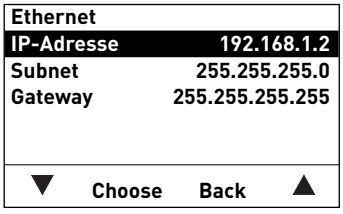


Fig. 114

Update Software

Der Update-Vorgang zur Aktualisierung der InfoWINplus Software über die Ethernet Schnittstelle wird gestartet.

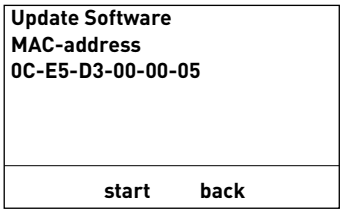


Fig. 115

Update LON

The update procedure for updating the LON Controller firmware is being started. The LON Controller firmware is included in the InfoWINplus software, therefore no external update tool is required.

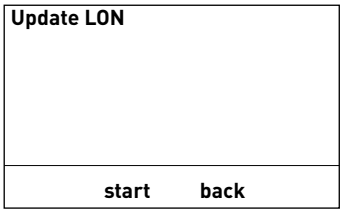


Fig. 116

Display contrast

Adjusters to change the contrast of the display.

Factory setting:	5
Setting range:	0 – 10

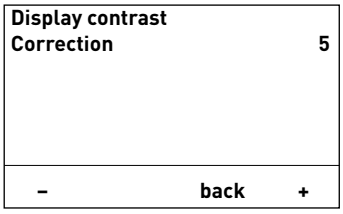
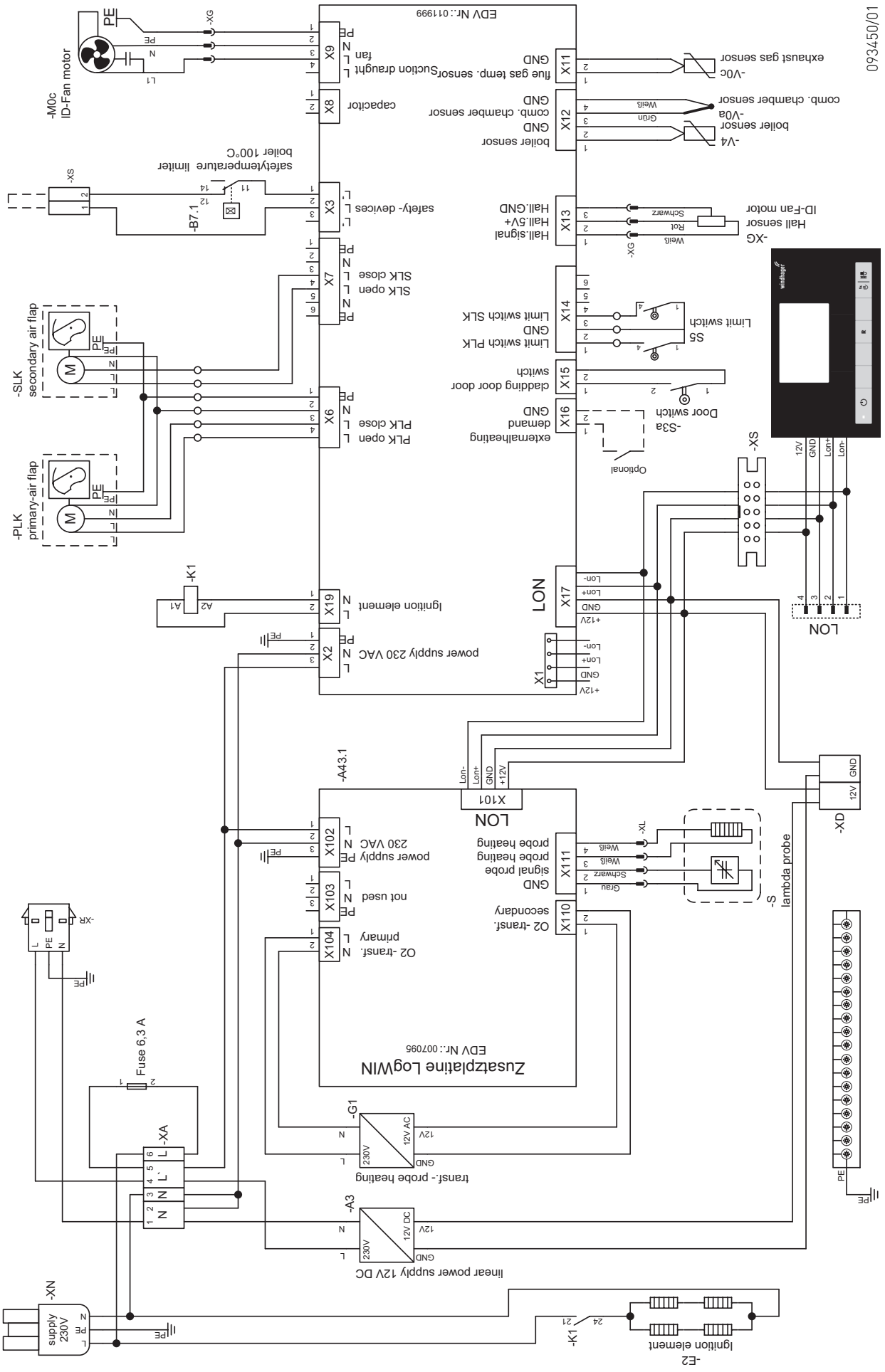


Fig. 117

4.9 LogWIN Klassik basic circuitry



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WARRANTY

The warranty requires that the boiler and related accessories be properly installed and started by Windhager Customer Service or Customer Service Partner; otherwise the manufacturer's warranty will not be honored. Malfunctions resulting from improper operation or adjustment as well as use of poor or not recommended fuel types are not covered by the warranty. Further, the warranty shall be void if equipment other than those provided by Windhager are installed. The special warranty restrictions for your system are available in the "Warranty Conditions" folder supplied with your boiler.

Start-up and regular maintenance following the terms of the "Warranty Conditions" will assure safe, environmentally friendly and economical operation of your system. We recommend that you obtain a maintenance service contract.

Subject to technical modifications. AWP-vor-übersetzt-aus-024150/02

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